

2020-2021

## Table of CONTENTS

General Information ..... 3
Daily Schedule, Semester System, May Term ..... 3
Graduation Requirements ..... 4
Course Load and Credits ..... 4
Course Registration ..... 5
Recommendations ..... 5
Honors Courses. ..... 5
Against Recommendation Policy ..... 5
Schedule Changes ..... 6
Add/Drop Deadlines ..... 6
Academics ..... 7
Advanced Placement ..... 7
Department Policies ..... 8
Exams ..... 8
Grades, GPA, Homework ..... 8-9
Late Work ..... 10
Multiple Assessments. ..... 10
Academic Status ..... 11
Academic Probation ..... 11
Cum Laude, Faculty Scholars, Honor/High Honor Roll, Waring/Barras Scholars ..... 11
Academic Resources ..... 12
Common Work Period ..... 12
Extra Help. ..... 12
Learning Lab, Math Lab. ..... 12
Study Hall, Tutoring ..... 13
Global Travel ..... 14
Department Offerings ..... 16
English ..... 16
World Languages ..... 23
History ..... 30
Mathematics and Computer Science ..... 35
Science ..... 42
Fine and Performing Arts ..... 47
Interdisciplinary ..... 54
Health, Wellness and Physical Education ..... 56
Off-Campus Semester Programs ..... 58
Faculty List ..... 59
Year-by-Year Course Offerings and Standardized Testing Option ..... 62
Academic Planning ..... 63

## GENERAL INFORMATION

## THE DAILY SCHEDULE

The Upper School operates on an eight-day (A day-H day) schedule. Major (six-credit) classes meet four times per cycle, and other classes meet one, two, or three times per cycle. Each class period lasts 75 minutes, and classes meet on a rotating basis, meaning that each class meets at a different time each letter day. There is a daily Common Work Period (CWP) that lasts 25 minutes, during which everyone is free to work individually or collaboratively. Meeting periods (such as assemblies, advisor group meetings and club meetings) usually take place at the end of the day, after classes are over.

## THE SEMESTER SYSTEM

The academic year is divided into two semesters. For each course, students receive an indicator grade of progress and a written comment at the mid-semester, and a grade of record at the end of the semester. There are additional progress reports for new students, students on Academic Probation, and as needed on a case-by-case basis. Students take comprehensive exams at the end of each semester; exam grades are reported separately from semester grades. Mid-year and final exams are given in all major academic classes and count in the calculation of the final grade for each course.

## TECHNOLOGY AND LEARNING

In 2007, all faculty members were issued laptops, and ongoing professional development encourages effective use of technology as a teaching and learning tool. In each department, professional development offers opportunities for faculty to explore and refine their use of discipline-specific applications as well as those used by the entire faculty. In September 2010, students in grades 4-12, and all faculty, were issued individual MacBook Pro laptops, together with an identical suite of software, to ensure a common platform for instruction. The use of technology as an effective teaching and learning tool is a key curricular and instructional focus. MKA students use technology tools to acquire knowledge, practice skills, problem solve, demonstrate and communicate understanding, and explore learning in new ways. Students are challenged to use technology to be more flexible, innovative thinkers and to understand and respect the moral and ethical issues related to their use of technology.
Teachers use a learning management system to gather and organize their course resources for student access, and to provide continuity from one class meeting to the next. A variety of synchronous and asynchronous technology tools provide powerful communication and collaboration opportunities that allow teachers and students to share ideas, provide and respond to feedback, and build knowledge together.

## MAY TERM

May Term provides all seniors with the opportunity to spend several weeks pursuing an area of interest in one of the options available that year. Examples include, but are not limited to, a service learning project, a teaching internship at MKA's Primary or Middle School, an internship, an entrepreneur and design cohort, a global experience program culminating in a trip, and an independent, creative, or academic project. With the exception of Advanced Placement classes and ensemble Fine and Performing Arts classes preparing end-of-year performances, seniors' classes end before May Term begins. Following successful completion of all academic requirements, seniors are released to May Term. Successful completion of May Term is a graduation requirement.

## OFF-CAMPUS SEMESTER SCHOOL PROGRAMS

Students interested in applying to an off-campus program must meet with the Academic Dean in advance to ensure that the receiving school is one that MKA pre-approves. The best time for a student to be away for a semester is during junior year. Once the Academic Dean notifies students of MKA's approval, they may apply. Families must inform MKA's CFO in writing of the student's intention to apply by February 1st of their sophomore year. It is school policy to allow no more than the equivalent of a maximum of three half-year tuition grants per academic year for semester programs. Students, who are offered admission to Chewonki, SEGL, or Oxbow, may be eligible for a grant, depending on how many applicants there are in a given school year. Students who are offered admission to other pre-approved semester programs may attend, but may not be eligible for a grant. MKA will determine which students receive the grants and how much each grant is worth. MKA's CFO will notify families as to the value of an applicant's grant once all admissions decisions are received. See page 58 for additional information.

## GRADUATION REQUIREMENTS

To graduate from Montclair Kimberley Academy, a student must earn 120 credits in grades 9-12, including successful completion of the following:
credits in English (3 each semester)
credits in one world language
credits in mathematics
credits in history, including U.S. History
credits in science, including Chemistry, Biology, and Physics credits in the fine and performing arts
credits in health, wellness and physical education credits in Global Citizenship
credit in Ethics and Leadership
successful completion of May Term, which takes place at the end of each student's senior year
For additional information, including the community service graduation requirement, please refer to the MKA Student/Parent Handbook.

## COURSE LOAD AND CREDITS

A standard course load is five academic majors each semester, plus one course in the Fine and Performing Arts Department and any other required courses. Five academic majors per semester is highly recommended all four years, although a minimum of four academic majors per semester is permitted. For some students, taking an additional course above and beyond the standard load of five academic majors may be appropriate. Students should be aware, however, of the demands of taking additional courses.

Students are required to take a minimum number of credits per year, depending on the grade they are in. The Academic Dean may grant exceptions to the minimum requirement in unusual circumstances. Ninth graders usually sign up for 36.5 credits, tenth graders usually sign up for 35 credits. The minimum number of credits required per year is 30 for juniors and seniors. Credit requirements in some departments are modified for students who enter the Upper School after ninth grade.

## DEFINITION OF PASSING

Students must pass a course to receive credit. A D- average for a course is considered passing. Students who earn an $F$ in a course must repeat and pass the course to receive credit. A student must pass $3 / 5$ of a full-year course to receive credit; therefore, a student who fails the first semester and the mid-year exam of a full-year course will be removed from the course since he/she cannot pass the course. Seniors must pass all their courses to graduate on time with their class. A final grade below C- in a sequential mathematics or world language course requires that the student repeat the course (and earn an appropriate grade on a qualifying exam) before advancing to the next level; the course may be repeated in a pre-approved summer school program or during the following school year.

## COURSE REGISTRATION

## COURSE RECOMMENDATIONS

Department recommendations for the following year are made in May, and are based on factors that include - but are not limited to - classroom performance, the ability to work independently, preparation for and participation in class, and standardized test scores, where appropriate. A recommendation means that a student may take that course, not that it must be taken. After final exams, recommendations are reviewed and may be amended. Students may find that they are recommended for courses for which they had not been recommended earlier, or that they are no longer recommended for courses for which they originally had a recommendation. Students and their parents receive notification by mail in late June about whether recommendations have changed. A parent must respond to the Academic Dean - to indicate whether or not the student is altering his/her course request(s) based on the change(s) in recommendation(s) - by July 1 in order for the school to finalize staffing and sectioning. Any response not received by then may not be honored.

## HONORS COURSES

Honors courses are accelerated courses for qualified students who have shown exceptional ability and who work well independently. Honors designation indicates one or more of the following about a course as compared to the non-honors course or to non-honors offerings at that grade level: it moves more quickly; covers more topics and/ or delves more deeply into the subject matter; and/or requires a greater level of inquiry. Honors courses require students to produce more creative and more extensive individual and independent work. For honors courses that are sequential, little time is spent reviewing material that students should have already learned. Placement in honors courses is not appropriate for all students and a manageable course load is important. Students are recommended for honors courses by meeting specific prerequisites; students who earn an A in a non-honors course are not automatically qualified for - or recommended for - the honors course at the next level. Students should discuss their overall course load with their advisor(s) and parent(s) before submitting a Course Request Form.

## COURSE REQUESTS

Students and parents discuss course recommendations and then meet with advisors to finalize course requests for the subsequent school year. The recommendations are used to guide students and their parents in the courserequest process. Students are encouraged to complete the most challenging academic program in which they can be successful, while keeping balance in mind. Students submit their course requests to their advisors in May; course requests should be made carefully and submitted on time. It is our students' responsibility to confirm that all requests are accurate before signing and submitting their forms. Once schedules have been generated, course availability is often limited. Confirmation of course enrollment is mailed to students in August and should be checked carefully against the list of course requests.

## AGAINST RECOMMENDATION POLICY

In order to request enrollment in a course against recommendation, a student must submit a signed form indicating that the student and parent(s) understand that: sectioning and staffing decisions will be based on the number of students recommended for a course; students may not be able to change courses; and, teachers are not required to provide unlimited extra help to students in courses against recommendation. Enrollment is not automatic. Students who end the school year on Academic Probation may not request any course against recommendation. Students may request only one course against recommendation, and may only request to move up one level - ex: from Precalculus to Precalculus Honors (not to Advanced Precalculus Honors). Students may not request any AP course (or post-AP courses) against recommendation.

## ENROLLMENT PRIORITY

When staffing considerations and class size restrictions limit course enrollment, priority will be given to upperclassmen and those students who have been recommended for the course. MKA does not guarantee course offerings when student sign-up is low. Students not re-enrolled or paid in full will not be scheduled, and space will not be saved until reenrollment is submitted.

## SCHEDULE CHANGES

While changes in course requests are allowed, they are subject to appropriate approval and deadlines. During the spring, a student wishing to make a change in course requests must discuss the matter with his/her advisor and parents, who must contact the Academic Dean. The Academic Dean considers changes in course requests made during the summer. A student who wishes to change course requests once the school year has started should discuss the matter with his/her advisor and parents, who must contact the Academic Dean. Because dropping or changing a course may affect class size and impact the balance in other courses, such requests may not be honored.

## DROP/ADD POLICY

The deadline for students to add/drop a year-long course is before the start of the third cycle of classes. (If adding, the course in which the student wishes to enroll must be offered, have room in it, and fit the student's schedule.) Students may add/drop a semester course before the start of the second cycle of classes. No change will be made if the course in which the student wishes to enroll is already full, even if the student was originally recommended for that course. NO CHANGES WILL BE MADE AFTER THESE DEADLINES, except for reasons of health or other compelling reasons that have approval of the Academic Dean and the Head of Campus. Students who add a course are expected to complete all work already assigned. Once a grade of record has been issued in a course, that grade will be noted on the student's transcript.

## DROPPING DOWN A LEVEL

In rare instances, a student who is working hard, struggling with the coursework, and has a very low grade may petition to drop down from an honors-level course to the standard level of that course, effective after the mid-year exam. The Department Chair will confer with the Academic Dean to review the request. Both courses, along with the grades earned, will appear on the student's transcript and will be part of the student's permanent academic record.

## SENIORS' COURSE CHANGES

Because colleges offer admission based on senior courses listed on the transcript, after the add/drop period, seniors are expected to complete all courses for which they have registered in semesters 1 and 2 . Once transcripts have been sent to colleges, any schedule change for seniors will be reported to the colleges to which that student applies. Any student who elects to drop a course must secure the approval of the Academic Dean, their college counselor, and any colleges to which they have been offered admission.

## INDEPENDENT STUDY PROJECTS

Independent Study projects provide opportunities for students in grades $10-12$ who wish to pursue topics not offered in the curriculum. Students must be in good academic standing to be eligible to propose an Independent Study project. Interested students enlist the aid of a faculty member in planning a course of study. Proposals are submitted in writing to the Academic Dean in September. Students must follow the guidelines of the program. Although credits and a grade are not assigned, successful completion is noted on the transcript.

## INDIVIDUAL STUDY

Individual Study may be available to a student when a requested course is not offered because of low enrollment or when a course does not fit a student's schedule. Individual Study is only available when there is adequate staffing, and when scheduling is possible as well.

## ADVANCED STUDY

If a student has exhausted all curricular offerings in a particular subject, the department may offer an advanced study course in cases where staffing permits.

## ACADEMIC REQUESTS

Requests for references, recommendations, report cards, transcripts, and other paperwork must be made in advance, with clear instructions and deadlines noted. This includes, but is not limited to: confirmation of academic status for auto insurance, social security paperwork, applications for summer programs, report cards for job interviews, and transcript requests for students transferring. The standard turn-around time for such requests is 24 hours, so students and families should plan ahead. Except for recommendations from individual teachers, these requests must be made directly to the Registrar.

## ADVANCED PLACEMENT

AP courses prepare students for AP exams, given at school in May. Students must take the AP exam for every AP course in which they are enrolled; otherwise, they may lose the AP designation for the course listed on the transcript. The charge for these exams, currently $\$ 94$ per test, is set by the College Board and appears on students' accounts. Students in AP courses at MKA are automatically signed up to take the corresponding exam(s) and do not have to register on their own. A student who is not enrolled in an AP course that MKA offers is not eligible to take that AP exam at MKA. Students who want to take an AP exam for an AP course that MKA does not offer must complete a registration form and return it to the AP Coordinator by the deadline. There is an additional $\$ 40$ late fee applied to exam registrations made after the deadline. There is a $\$ 40$ cancellation test fee charged for each exam not taken. Applicable exam charges will appear on students' accounts.

## AP COURSES AND EXAMS OFFERED AT MKA

- Art and Design
- Biology
- Calculus AB
- Calculus BC
- Chemistry
- Chinese Language and Culture
- Computer Science A
- English Language and Composition
- English Literature and Composition
- Environmental Science
- French Language and Culture
- Latin
- Music Theory
- Physics 1: Algebra-Based
- Physics C: Electricity and Magnetism
- Physics C: Mechanics
- Spanish Language and Culture
- Statistics


## AP EXAMS OFFERED AT MKA (UPON REQUEST)

- Art History
- Comparative Government and Politics
- European History
- Human Geography
- Macroeconomics
- Microeconomics
- Psychology
- Physics 2: Algebra-Based
- United States Government and Politics
- United States History
- World History: Modern


## AP EXAMS NOT OFFERED AT MKA

- AP Seminar
- Computer Science Principles
- German Language and Culture
- Italian Language and Culture
- Japanese Language and Culture
- Spanish Literature and Culture


## DEPARTMENT POLICIES

Department policies vary. Teachers provide students a copy of their department's policies (including penalties for late assignments) at the beginning of each course. Students are expected to be aware of and adhere to department policies. In addition, students must follow guidelines for making up missed assignments and assessments.

## EXAMS

All students are required to take a mid-year exam in full-year academic courses. For $S 1$ courses, the December exam is a final exam. All students in grades 9-11 are required to take a final exam in all full-year and S 2 academic courses, except full-year AP courses. All teachers of a course design mid-year and final exams cooperatively. All students in courses with multiple sections take the same exam. Depending on the course, this exam may have a portion that is teacher specific.

## FINAL EXAMS FOR SENIORS

Seniors do not sit for final exams; instead, teachers may assign a culminating assessment in each non-AP course. Culminating assessments take a variety of forms, for example a paper or project. These assessments will not count as separate, stand-alone grades; rather, the grade will be part of seniors' second semester grades.

## FLAGRANT NEGLECT

This grade may be assigned to a senior in a semester or full-year course during S2 after a conference with the student, parent, teacher, and Academic Dean. FN is given to a student who is judged to be failing because of little or no effort. Regardless of a student's previous record, a student cannot pass a course with an FN.

## GRADES

| Letter Grade | \% Range | 4.0 Scale | Number Grade |
| :---: | :---: | :---: | :---: |
| A | $93-100$ | 4.00 | 95 |
| A- | $90-92$ | 3.66 | 91 |
| B+ | $87-89$ | 3.33 | 88 |
| B | $83-86$ | 3.00 | 85 |
| B- | $80-82$ | 2.66 | 81 |
| C+ | $77-79$ | 2.33 | 78 |
| C | $73-76$ | 2.00 | 75 |
| C- | $70-72$ | 1.66 | 71 |
| D+ | $67-69$ | 1.33 | 68 |
| D | $63-66$ | 1.00 | 65 |
| D- | $60-62$ | 0.66 | 61 |
| F | Below 60 | 0 | 50 |

## GRADE POINT AVERAGE AND TRANSCRIPTS

A student's GPA is calculated on a 4.0 scale, and both annual and cumulative GPAs appear on each student's transcript. MKA does not weigh grades. Only courses taken at MKA during the school year are used in the GPA calculation. All graded courses at the Upper School count towards the GPA. Transcripts reflect final grades and credits only, and are mailed home at the end of each school year.

## GRADING AND AVERAGES

Students receive grades of record at the end of each semester. In full-year courses, each semester grade counts $40 \%$ of the final average for the course, and the mid-year exam and the final exam each count $10 \%$. In semester courses, the semester grade counts $80 \%$ and the final exam counts $20 \%$. When there is a mid-year exam but no final exam, each semester counts $40 \%$ and the December exam counts $10 \%$; the total is then divided by 9 (instead of 10 ). The final average is the grade that appears on transcripts. For seniors, a mid-year average is sent to colleges for all courses. The mid-year average is calculated like any semester-long course, which is $80 \%$ for the semester grade and $20 \%$ for the mid-year exam. Seniors with any reported grade below C- lose Senior Privileges until their low grade rises.

## HOMEWORK

Homework is given in all academic courses. The purpose of homework is to prepare students for class by adding to their knowledge in a particular subject, practicing skills they have learned, and/or applying information they have studied. In addition, homework serves as a means for teachers to measure students' mastery level of the concepts or skills discussed in class. Since classes meet every other day, students are strongly encouraged to complete their homework the day it is assigned. Doing so allows students to see their teachers for clarification the next day if necessary. Completing homework the day it is assigned, rather than waiting until the night before the class next meets, allows students to complete the assignment while the day's lesson is still fresh in their minds. Homework assignments generally take 60 minutes, although the amount of time it takes an individual student to complete any given assignment varies. Because each class meets every other day, students do not have homework for all their classes every night. Over vacations, students may be given the equivalent of one night's homework in each course. Students in honors or Advanced Placement courses may have more homework. Students must plan ahead so they have enough time to complete long-term assignments. Students are encouraged to develop their time-management skills, using study halls, free periods, Common Work Periods, and other times during the school day to work on their assignments. Students must work on homework assignments alone unless instructed otherwise by their teacher. All work submitted by students must reflect their own words and ideas.

## HOMEWORK REQUESTS

Students should be responsible about making up work they miss when they are absent. Teachers understand that students who miss school for legitimate illnesses may not be able to spend that same day studying or doing homework. Upon return to school, students should see each teacher whose class was missed. For brief absences, students should consult the learning management system, or contact a classmate in each course. It is expected that students get their own assignments. For longer absences, the advisor will work with the family to collect missed assignments.

## INCOMPLETE GRADES

All assignments must be handed in, and all assessments must be made up by the last day of each semester. Failure to complete work by that date will result in a grade of F (zero) for that work. The Academic Dean must approve any extension of this deadline. If an extension is granted, a grade of Incomplete (INC) will be recorded when grades are due. An approximate grade range and written comment will accompany any grade of INC.

## INDICATOR GRADES

Grades of record are given at the end of each semester, S1 and S2. Indicator grades are given for all students at each mid-semester deadline, MS1 and MS2. In addition, indicator grades are given at the early notification deadline, EN1, several weeks into the first semester, for all 9th graders, new students, and in some other cases. An indicator grade is not a grade of record; it is a general measure of student achievement partway through the semester. The intent of assigning an indicator grade is to give students and parents information about progress in a course while there is time left to make improvements. The information provided, describing prescriptive measures for improvement, is as important as the student's grade. It is the policy of the College Counseling Office (CCO) to report MS1 grades, without exception, between November 1 and November 15, to all colleges where students have pending applications. CCO counselors also provide updates in particular courses(s) as necessary and as requested by individual colleges.

## LATE AND/OR UNSATISFACTORY WORK

In order to promote acceptable standards of academic performance, students must submit all work on time. Late penalties, described in each department's policies, will affect a student's grade. After absences, excused or unexcused, students must see their teachers immediately to create a specific plan to make up assignments and assessments; students have two days to make up work, or to take missed assessments, when they have been absent for one day. Students who do not comply may be referred to a member of the administration.
In instances where students submit inadequate work, departments have guidelines to ensure that students work towards reaching a minimum level of achievement. The result is that outside of plagiarism, no student can earn lower than $50 \%$ on a major assessment. Major assessments include tests and papers, not quizzes or daily homework problems/exercises. In addition, students must complete all major assessments. Teachers will create and implement a plan in instances where students do not meet deadlines and/or do not complete work to an acceptable standard.

## MULTIPLE ASSESSMENTS

Students who feel overwhelmed with the number of assessments in one day for which they must prepare have an option. In most cases, students are not required to take more than two announced, graded assessments scheduled on a given day. Immediately after the third graded assessment is announced, it is the student's responsibility to make the teachers aware of the conflict and arrange for an alternative testing time. If a student fails to notify the teachers in advance, the student may be required to take all scheduled assessments. In some instances, for example on the last day before a vacation or on the last day of a semester, a student may be required to take more than two assessments in a day.

## ACADEMIC PROBATION

Academic Probation is a formal statement of concern to students who have shown a pattern of academic deficiency. This designation is not included on any record sent to other schools or colleges. The purpose of Academic Probation is to provide incentive to study and to get help. The enrollment contract for the following year for a student on Academic Probation may be withdrawn, may not be offered, or may be offered on a conditional basis. Students on Academic Probation at the end of the school year may not sign up for any course against recommendation, and may not request or take more than five academic majors the following year. Students may be removed from Academic Probation based on their semester grades. However, they may be placed on Academic Probation at any time grades are issued. The Academic Dean reserves the right to place seniors on Academic Probation at any time during their senior year. Seniors on Academic Probation lose Senior Privileges. Seniors may be removed from Academic Probation during the second semester based on their MS2 grades.

## CUM LAUDE

The Cum Laude Society is a national academic honor society. Each spring, some seniors are inducted into the MKA chapter of the society. Notification occurs in late April, and the induction ceremony takes place the day before Commencement. Induction into Cum Laude is the highest academic honor that MKA bestows upon members of its graduating class. The criteria used for selection include: academic achievement, strength of program, demonstrated intellectual curiosity, academic leadership, integrity, and disciplinary record. The selection process begins when each department submits nominations; these nominations are then taken to the Cum Laude committee for consideration. Each school may induct up to $20 \%$ of its senior class.

## FACULTY SCHOLARS

The Faculty Scholar Award was established by the Upper School faculty in 1987 to honor students who are deemed to be outstanding scholars. We define scholarship as the active search for knowledge, going beyond the requirements of a course. Faculty Scholars have demonstrated unusual intellectual curiosity and sought knowledge for its own sake rather than for material rewards. They have also exercised leadership and fair-mindedness by sharing their talents selflessly with their peers. The award is the highest recognition MKA grants for scholarship in the 9th, 10th, and 11th grades. The selection process begins when each department submits nominations; these nominations are then taken to the full faculty.

## HONOR/HIGH HONOR ROLL

The Honor Roll is determined by semester (not exam) grades as follows. All graded courses count towards the determination of Honor Roll or High Honor Roll designation. Students who fail a Pass/Fail course do not qualify for Honor Roll or High Honor Roll status.
Honor Roll: the criteria for earning Honor Roll recognition are at least a B- in all graded courses and a semester average of at least 3.0
High Honor Roll: the criteria for earning High Honor Roll recognition are grades of A- or higher in all graded courses

## WARING/BARRAS SCHOLARS

Waring and Barras status is determined by semester (not exam) grades as follows. All graded courses count towards the determination of Waring or Barras designation. Students who fail a Pass/Fail course do not qualify for Waring or Barras status.
Mary K. Waring Scholars: Students who make the High Honor Roll in both semesters of a given school year Avery Barras Distinguished Scholars: Students who make the High Honor Roll in both semesters of a given school year, and who earn only A's (no grade of A- or below)

## COMMON WORK PERIOD

The goal of the Common Work Period (CWP) is to provide students with time during the academic day to work with their teachers and peers. While some classes hold required meetings, much of the time is structured by the students. Students are able to choose among a variety of activities: getting help from teachers, meeting with their advisors, working on homework/labs/projects, conducting research, working in art studios, using extended time to finish assessments, or meeting and collaborating with other students to work on class projects, review for upcoming assessments, or work on co-curricular projects.

## EXTRA HELP

Teachers are available, by appointment or on a drop-in basis, to give extra help before school, during their free periods, during Common Work Periods, and after school. Students are expected to keep appointments they make with their teachers for extra help. While teachers are frequently available for extra help without advance notice, students should not count on finding teachers available for individual help without appointments.

## HOME INSTRUCTION/EXTENDED MEDICAL LEAVE

Upon occasion, a student may be absent from school for an extended period of time for medical reasons. MKA families are eligible to apply for home tutoring through their county's Educational Services Commission. A doctor's note verifying the diagnosis and estimated length of absence must accompany an application for tutorial support. The Upper School Registrar files the application at the family's request, once a student has accrued ten consecutive days absent. Tutors may not be available in all subjects, are usually assigned for one hour/week, and generally a county provides tutors for a maximum of 60 school days.

Should a student experience an extended absence from school for a documented chronic or long-term illness/injury, MKA faculty, under the supervision of the Academic Dean, provide syllabi and assignments for students. MKA faculty, for the purpose of determining possible credit, grade all work assigned on a Home Study. The Academic Dean must approve any exception to this policy. Credit may be withheld in cases where a student has excessive absences and is unable to make up work. In cases where a student is capable of completing work in a timely fashion, the Head of Campus and Academic Dean may petition the faculty to grant credit, which may be assigned a grade of P (Pass). The Head of Campus and Academic Dean will consider cases on an individual basis, after a conference with the parents. In the event of a lengthy medical absence, generally exceeding 60 school days, or in aggregate, a series of leaves amounting to 60 days, a student may be asked to withdraw from MKA.

## LEARNING LAB \& QUIET STUDY AREA

The Learning Lab, which includes a quiet study area, provides students with the opportunity to develop and improve their approach to learning tasks. The learning specialists there are available to students who would like to work on metacognitive strategies. Additionally, some students may be assigned to regular meetings with a learning specialist when specific support is warranted. In these cases, attendance as assigned is mandatory. Drop-in support is available, but students are advised to make appointments in advance to ensure that a learning specialist will be available. Students may attend the Learning Lab during study halls if they have obtained a pass in advance. In addition, students may work in the quiet study area even when not meeting with a learning specialist.

## MATH LAB

The Math Lab, staffed by math teachers and advanced students, offers support for students who need extra help or guidance in mathematics. Students are encouraged to use the Math Lab as often as needed. Students may attend the Math Lab during study halls if they have obtained a pass in advance. When students need additional help on a regular basis, their math teacher may assign them to Math Lab. In these cases, regular attendance as assigned is mandatory.

## NEUROPSYCHOLOGICAL EVALUATIONS

Students whose academic performance may be impacted by a diagnosed learning disability and/or ADHD, or whose individual learning challenges appear to impede successful learning, may be referred to appropriate specialists outside of school for diagnostic testing. After diagnostic testing is complete and documentation has been submitted for review, specific accommodations for learning disabilities and attention issues will be considered by a committee that includes the Academic Dean, the Director of Academic Support, the learning specialists, and the school's counselor. The Academic Accommodations Committee meets four times per year in September, November, February, and May. MKA is limited in its ability to address the needs of students with learning and executive function disabilities; families receive a list of approved accommodations when requesting information about diagnostic testing. A student may not be offered an enrollment contract if, in the opinion of the faculty and administration, the school is unable to meet the student's learning needs, and the student is unable to learn and achieve successfully. Furthermore, if a student is disruptive, unable to meet academic or behavioral standards, or places an undue burden on faculty, MKA may not retain the student.

## OTHER EVALUATIONS

Students whose academic performance may be impacted by a medical or psychiatric condition may provide documentation that includes a doctor's diagnosis to the Director of Academic Support, who will meet with the appropriate MKA professional(s) to determine whether or not an accommodation is warranted. For medical conditions, the family must give the Upper School nurse permission to speak with the student's doctor. For psychiatric conditions, the family must give the Upper School counselor permission to speak with the student's therapist. Not all students with a diagnosis qualify for accommodations. If a student is unable to meet academic or behavioral standards, or places an undue burden on faculty, MKA may not retain the student.

## STUDY HALL

The purpose of study halls is to provide students with a monitored place to study and do school work. Depending on the proctor, and the size and location of the study hall, it can be a silent study or a place where quiet collaboration is permitted. Study halls are proctored by faculty members, and students are encouraged to use that time wisely. All ninth graders are assigned to study halls; those who make High Honor Roll in S1 are exempt from study halls in S2. Sophomores who make Honor Roll during the second semester of ninth grade are exempted from study hall for the following semester. All sophomores are exempted from study hall in the second semester of sophomore year.

## TECHNOLOGY AND LEARNING COORDINATOR

Students may seek help with time management and study skills from the Technology and Learning Coordinator, whose office is in the Academic Center. In addition, students may choose to attend the workshops offered each semester that help students learn ways to prepare for mid-year and final exams. Drop-in support is available throughout the year, but students are advised to make appointments in advance to ensure that the Coordinator is available. Students may meet with the Coordinator during study halls if they have obtained a pass in advance.

## TUTORING

Without a teacher's suggestion: Before a family hires a tutor without a teacher's suggestion, the student should seek extra help from his/her teacher.
With a teacher's suggestion: If a student needs more help than his/her teacher can provide during regular extrahelp sessions, the teacher may suggest an outside tutor after consulting with the Department Chair. The student's advisor must be notified of the recommendation. While other MKA teachers who are not currently the student's teacher may be available, the Department Chair may know of other qualified tutors, or parents may seek a tutor elsewhere. Arrangements for tutors are made directly between the parents and the tutor.
In all cases, a student will get the most out of working with a tutor when the tutor is in contact with the student's teacher. In addition, all work submitted by a student must represent the student's own work and ideas rather than those of a tutor.

## GLOBAL TRAVEL

At MKA, we value the integration of classroom learning and real-world experience. As we prepare our students to live and work in the 21st Century, we strive to "engage each student personally and intellectually with the world," as our Mission Statement suggests. Through travel, students find themselves in a position to affect change because they are encouraged to build bridges between themselves and people in other places. The following programs provide opportunities for students to apply what they study in the classroom in a global setting and to help them to cultivate a world perspective through experience. These descriptions are a guideline of what may be offered during a student's years at the Upper School and the decision to run a program is contingent upon student enrollment, staffing availability, and the safety and security landscape. Please note: all students have the opportunity to apply for financial assistance to help support the cost of one trip.

## FRENCH LANGUAGE OPPORTUNITIES

One of the most rewarding aspects of language study is the chance to use the skills learned in the classroom and experience another culture in an authentic setting. To that end, French students at MKA have the opportunity to participate in two trips in their four-year high school career to practice their French and become acquainted with two small corners of the vast French-speaking world. First, French students have the opportunity to be part of a cultural immersion program in Guadeloupe. On this spring break experience students will stay with host families and explore a school setting as well as immerse themselves in local culture. Secondly, in alternating years, MKA offers a five-day excursion to Québec over Presidents' Weekend. This trip is designed to expose students to a flavor of Québécois culture and history at the time of year that Québec is at its most beautiful - winter! In some years, this trip coincides with the Carnaval de Québec, the largest winter carnival in North America.

## BACKPACKING AND WILDERNESS LEADERSHIP

This annual spring break trip centers on a 3 to 5-day backcountry hiking experience. The other component of the trip alternates between completing a Wilderness First Aid Training course and an outdoor adventure course. Locations include Zion National Park, California's Lost Coast, Big Sur, Point Reyes, Yosemite National Park, and Lake Tahoe. ARCC, a leader in educational travel, will organize the logistics for the on-the-ground portion of our trip and will provide us with a certified Wilderness First Responder as our backcountry guide for each hiking group. This trip will provide students with a chance to develop leadership skills and confidence in their ability to explore the outdoors. Students will return from the trip as certified providers of first aid and CPR in that environment.

## CHINA: LANGUAGE, TRADITION, AND CULTURE

An opportunity to travel to China will be offered every year, alternatingly in June (open to students who study Chinese) or as part of May Term (open to all seniors). The June trip will focus primarily on Chinese language acquisition and includes a three-night homestay in the ancient capital of Xi'an, as well as a visit to our sister school there. Students will also take part in many rich cultural activities and will volunteer at the Museum of Qin Terra-cotta Warriors and Horses. The May Term program is designed to allow students to explore Chinese tradition and culture, and to offer a glimpse of China seldom seen by Westerners. The May Term trip includes visits to some of the finest achievements of the Middle Kingdom including: the Great Wall, the Hanging Monastery, and the Forbidden City.

## SPANISH LANGUAGE IMMERSION

This exchange is with Instituto Abdón Cifuentes, a prestigious private school in San Felipe, Chile. A small group of students from that school will come to MKA during the month of February and, in turn, MKA Spanish students will travel to Chile in June. Both in Chile and at MKA, students will participate in curricular activities at the host school and will be offered trips in the surrounding areas. In order for students to fully immerse themselves in the language and culture of the host country, students will stay with host families hand-selected by the hosting school. Our longest lasting program, this exchange will reach its eleventh year during the 2020-2021 school year! Please note that MKA students may participate in either part of the exchange or in both parts. In order to travel to Chile, MKA students must have completed Spanish 3 by the summer of the year they travel.

## COMMUNITY ENGAGEMENT AT HOME AND ABROAD

Open to all students who wish to extend their community engagement experiences beyond our local area, MKA sponsors community engagement trips each year to an international location and every other year to a domestic location. Our two international experiences venture to Guatemala and Cuba, where those students who have been studying Spanish can use their language skills in real-life situations, from building a home to designing English lessons in an orphanage. ALL students have the opportunity to communicate with and interact with local residents with whom we work. Students will participate in every level of the building process, from clearing land to digging foundations, mixing concrete to mortaring with rebar and blocks, and setting scaffolding to replacing roofs. Currently our domestic experience takes students to Heart Butte, Montana to engage and work alongside the Blackfeet community. Projects on this domestic experience may involve ranch hand work, community clean up, soup kitchen volunteering, and among other activities in response to the community's needs. Whether at home or abroad, students will forge personal connections through sweat equity. Often through the organizations with whom we volunteer, students will have opportunities to volunteer in schools and/or with a local healthcare clinic. At some point during the community commitment, students will participate in excursions that allow for unique geographical and/or historical experiences. Trips are generally 8-10 days in length and take place during the first week of spring break or after final exams in June. Students may use service hours collected towards their graduation requirement.

## ENGLAND BY THE BOOK

This June trip provides the opportunity to visit the greatest "pilgrimage sites" of English literature: London and Westminster (Bloomsbury/Dickens Museum, the Globe and Poets' Corner), the Lake District (the Romantic poets), the Yorkshire moors and Haworth (the Brontës), Stratford (Shakespeare), and Bath (Austen). By enabling students to ground their past (and future) reading experiences in actual places, people and events, the trip brings new life to some of the greatest writers and works in English. Along the way, it provides encounters with a British culture that is still, in many important ways, different from our own. The itinerary may include theater events at Stratford, the National Theatre, and/or the Globe.

## GLOBAL LEADERSHIP IN TANZANIA

This June trip seeks to empower young leaders to find innovative solutions to the world's pressing problems. We do this by partnering with the Tumaini School, a K-12 school in Karatu, Tanzania to make the shift to 21st century learning. The goal is to help both schools create student-centered learning environments where students learn to think critically, communicate across cultures, collaborate and find creative solutions to problems. In the process, young leaders find their voices. During this experience students will also explore the Kilimanjaro area and go on a safari in the Ngorongoro Crater.

## PROJECT AND PROBLEM BASED TRAVEL EXPERIENCES

Each year (during May Term or the summer) we offer students a travel opportunity to develop their research, problem-solving, and project-building skills in a cooperative, team-based environment outside the United States. These trips are an extension of our Ninth Grade Global Citizenship curriculum and therefore engage with those we meet through the Design Thinking process. Design Thinking offers students a human-centered model with which to tackle even the most complex social, political and economic problems and focuses primarily on building empathy for those the design targets. Our May Term experiences have included examining clean and renewable energy in Iceland, population demographics in Japan, racial equity and justice in America, and the slow food movement in Southern Italy. In the summer we have offered a deep dive into economic development, entrepreneurship, and cultural identity in the Balkans.

## ENGLISH

The English program combines traditional and progressive approaches to the study of literature and writing. This comprehensive approach moves from the ninth and tenth grade core courses to the eleventh and twelfth grade topics. Students read and interpret carefully selected literature from various genres, write in diverse modes of discourse, and refine their written and oral skills of interpretation and expression. The first two years provide a foundation, focusing on genres, writing techniques, grammar, and usage. Ninth grade students read significant literary classics and study the fundamentals of the analysis essay. Tenth grade students move on to study various literary models that afford students the opportunity to fine-tune formal and informal writing skills to encourage a more sophisticated approach to literary analysis. The topics in the eleventh and twelfth grades launch students into specific, focused courses that provide opportunities for in-depth analysis of and writing about periods, epochs, writers, and genres. The Eleventh Grade Writing Challenge specifically assesses students' writing competency in a formal essay-writing experience. The MLA (Modern Language Association) style is a department requirement for all documentation and citation.
Graduation Requirement: Students must take four years of English at the Upper School. While juniors and seniors may opt to take two English courses during one semester, they must take at least one English topic each semester to fulfill the graduation requirement in English.

## ENGLISH 1 (101)

This course introduces students to critical reading and analytical writing. A variety of literature provides students with sources and models for writing. Students will learn to construct effective sentences, focused paragraphs, and coherent essays. In addition, students will develop a fundamental understanding of standard English grammar through instruction and exercises. Students will also engage in vocabulary study to enhance precise written expression and textual analysis. Students will explore themes such as social justice, gender roles, transformation, and redemption. Texts may include: Edith Wharton, Ethan Frome; William Golding, Lord of the Flies; William Shakespeare, Julius Caesar; John Steinbeck, Of Mice and Men; Sophocles, Oedipus Rex and Antigone; Athol Fugard, Master Harold and the Boys; August Wilson, Fences; Jumpa Lahiri, Interpreter of the Maladies; and various poetry selections.
Full Year 6 Credits

## ENGLISH 1 (103) HONORS

This course incorporates and expands the ninth grade curriculum, amplifying the scope and depth of the independent inquiry of students. Additional texts may include Charles Dickens, A Tale of Two Cities and Jane Austen, Pride and Prejudice. Assignments enhance students' scholarly inclinations and understanding of literary elements and formal writing. Students must have strong writing skills and an emerging command of the conventions of academic writing. Supplementary texts will augment each major literature unit, and essay assignments will require incorporation of complementary critical sources. Grammar and vocabulary units are designed to supplement formal writing and critical reading skills.
Prerequisites: A- in 8th grade English and department recommendation
Full Year 6 Credits
ENGLISH 1 CRITICAL READING AND WRITING (107)
The goal of this course is to offer more opportunities for one-on-one support than a student would get in the standard English 1 (101) course. Placement in this class is based on past performance in English, and the pace of this course is designed to meet the needs of students who face challenges in critical reading and analytical writing skills. Ninth graders will read from a core curriculum and study the same topics in grammar, sentence structure, and vocabulary. (Please refer to the description of English 101 listed above.) The same grading standard is used for all students in English 1, and all students will take the mid-year and final exams that reflect their scope of the ninth grade curriculum.

$$
\begin{array}{ll}
\text { Prerequisites: } & \text { Department recommendation; students may not take this course against recommendation } \\
\text { Full Year } & 6 \text { Credits }
\end{array}
$$

In this foundational course, students will continue to hone their critical reading and writing skills, building on their knowledge base from English 1. Students will engage in close-reading exercises and learn strategies that help them explore literary texts with greater depth and insight. The connection between careful reading and good writing is stressed in all stages of the writing process. While the writing focus is on the literary analysis essay, students will have ample opportunity to write in other forms, such as narrative and creative. In this sophomore year course, students will work on developing more sophisticated diction and variety of sentence structure, along with greater fluency and grammatical precision. The first semester covers early works ranging from the Bible, Beowulf, Shakespeare's Macbeth, to nineteenth century Romanticism. The literary focus shifts to modernism in second semester and culminates with F. Scott Fitzgerald's The Great Gatsby and Dinaw Mengestu's The Beautiful Things that Heaven Bears. Students will explore themes such as alienation in society, prejudice, responsibility, and loss of innocence.
Full Year
6 Credits

## ENGLISH 2 (104) HONORS

This course advances the tenth grade curriculum, amplifying the scope and depth of independent intellectual inquiry required of students. Rigorous assessment enhances students' scholarly sophistication and requires in-depth understanding of literary elements. Students must have previously demonstrated exceptional writing skills and a thorough command of the conventions of academic writing. Challenging supplementary texts will augment each major literature unit, and essay assignments will require incorporation of complementary critical sources. Integration of grammar and vocabulary will continue with stronger focus on independent work.

| Prerequisites: | B+ in English 1 Honors and department recommendation. Students in English 1 are <br> considered in June. |
| :--- | :--- |
| Full Year | 6 Credits |

## ENGLISH 2 CRITICAL READING AND WRITING (106)

This course offers the same core curriculum as English 2 and 2 Honors (please refer to the description of English 102 listed above), but the pace of the course and the depth of material are designed to meet the needs of students who require additional support in critical reading, reading comprehension, and analytical writing skills. Classroom instruction is focused on strengthening and broadening skills through literary analysis, frequent critical writing assignments, and additional grammar and vocabulary enrichment. This class is grouped according to past performance in English. The same grading standard is used for all students in English 2, and all students take the mid-year and final exams that reflect their scope of the tenth grade curriculum.
Prerequisites: Department recommendation; students may not take this course against recommendation
Full Year 6 Credits

These topics offer challenging and varied courses that include diverse centuries, genres, themes, and cultures. The courses engage students in serious, rigorous, college-preparatory classes that expand and stretch horizons and develop ongoing competence in the writing process. Classes vary in literature, but they all support the careful development of critical reading and writing skills, and they share a common element: a memoir project for juniors in May. Each course requires a combination of long and short essays along with tests and quizzes. Students indicate choices, but there are no guarantees; class size and individual student programs will affect scheduling. Seniors' choices will receive priority. All offerings are based on available staffing and sufficient sign-up.

## ADVANCED PLACEMENT LANGUAGE AND COMPOSITION (145)

In this course, students will examine the art of rhetoric to understand how writers use language to persuade. Organized around different topics of current and historical interest, the reading includes nonfiction, speeches, essays, as well as some fiction and poetry. Students will learn to read and analyze rhetorical elements and their effects in texts from many disciplines and historical periods. The writing focuses on evidence-based analytical and argumentative essays, but also includes creative assignments such as pastiches and personal essays. Self-directed intellectual engagement is required as students read outside works on their own while keeping up with assigned daily reading. Over the years these outside works have included Katherine Boo, Behind the Beautiful Forevers; Edwidge Danticat, Brother, Im Dying; Robert Coles, The Call of Stories: Teaching and the Moral Imagination; Barbara Ehrenreich, Nickel and Dimed: On (Not) Getting By in America; Henry David Thoreau, Walden; Tim O’Brien, The Things They Carried; George Orwell, Politics and the English Language; Tara Westover, Educated; and Ta-Nehisi Coates, Between the World and Me.
Prerequisites: A- in English 2 Honors and department recommendation. Departmental expectations of AP students include independence, dedication, intellectual leadership, and superior classroom performance, as evidenced by sophisticated and inspired writing (in particular on in-class essays and exams). Students in English 2 with an A are considered in June. The AP recommendation is contingent upon maintaining an A- in the fall of junior year. Students who did not earn the recommendation in June are considered in the fall of junior year; they must have an A- in their English course and must submit a portfolio of their recent writing, which will be reviewed by the English Department.
Spring 3 Credits

## ADVANCED PLACEMENT LITERATURE AND COMPOSITION (135)

The aim of this advanced course is to challenge students with significant pieces of literature and poetry, encompassing a range of styles, time periods, and genres. Beyond what the text says itself, students will grapple with how the author has constructed their work and will understand how an author's particular usage of stylistic elements in their writing further contributes to the meaning of the text. An awareness of common technical components within writing, therefore, guides each unit. Students should expect a rigorous college-level seminar format in which they are the ones leading the class. Therefore, students must read critically and participate meaningfully. In this course, students will write one in-class essay per cycle based on new material. Texts may include: William Faulkner, The Sound and the Fury; X.J. Kennedy, An Introduction to Poetry; William Shakespeare, Othello; James Joyce, "The Dead"; Toni Morrison, Beloved; as well as selected essays and poetry.
Prerequisites: $\quad \mathrm{B}+$ in AP Language or an overall average of A- in eleventh grade English and department recommendation. Departmental expectations of AP students include independence, dedication, intellectual leadership, and superior classroom performance, as evidenced by sophisticated and inspired writing (in particular on in-class essays and exams). Students in English Topics with an A are considered in June. The AP recommendation is contingent upon maintaining an A- in the fall of senior year. Students who did not earn the recommendation in June are considered in the fall of senior year; they must have an A- in their English course and must submit a portfolio of their recent writing, which will be reviewed by the English Department.
Spring 3 Credits

This course, an interdisciplinary offering, is open to seniors. Students must decide whether to apply the 6 credits to English or History, or they may apply 3 credits to each department. PLEASE REFER TO
THE INTERDISCIPLINARY SECTION OF THE CURRICULUM GUIDE TO READ THE FULL COURSE DESCRIPTION.
Full Year
6 Credits

## 20 ${ }^{\text {th }}$ CENTURY AMERICAN LITERATURE (122)

This course bears witness to the rise of the individual within an increasingly diverse American society in the 20th century.
No longer insulated and isolated from its neighbors, a transforming America confronts the challenges of materialism and skepticism, as well as social, racial, and political challenges. Moreover, the 20th century gives birth to a new literary age peopled with imaginative, powerful and diverse voices which complement a determination to shatter conventional expression. The course traces the emergence of a literary chorus from diverse regions and classes that resound with expectant hopes, dreams lost and found, and visions tried and challenged. Texts may include: Ernest Hemingway, The Sun Also Rises; John Steinbeck, The Grapes of Wrath; Zora Neale Hurston, Their Eyes Were Watching God; James Baldwin, Giovannis Room; and Willa Cather, My Antonia. Modern films will enrich the literary texts.

3 Credits

## 20 ${ }^{\text {th }}$ CENTURY WORLD LITERATURE (147)

The course centers around four essential questions: What does it mean to be human? What kind of world do we live in? Why do we suffer? How should we live? These are vital questions about humanity, ones which have been continuously asked and answered in various forms across the globe and throughout history. Students will approach the course material through a variety of analytical lenses, including existentialism, feminism, and postcolonialism. They are encouraged to develop creative interpretations of the texts, and support their ideas with analytical depth and precision. This process is emphasized in all aspects of the course, but particularly in formal essays and creative projects. The ultimate goal is for students to discover art's power to transform our understanding of the world and our place within it. Readings may include: Shusaku Endo, Silence; Albert Camus, The Stranger, The Plague; Chinua Achebe, Things Fall Apart; Tayeb Salih, Season of Migration to the North.
Fall
3 Credits

## AMERICAN ROMANTIC LITERATURE (142)

This course focuses on representative writers from the mid-nineteenth century: Ralph Waldo Emerson, Henry David Thoreau, Frederick Douglass, Nathaniel Hawthorne, Herman Melville, Walt Whitman, and Emily Dickinson. Similar to its European counterpart, American Romanticism emphasized a spiritual connection to nature, individual freedom, and freedom from outmoded literary expressions, among other ideas. Mark Twain and Kate Chopin, writers whose works mark the transition from Romanticism to Realism, will round out our study of this period. Texts may include Nathaniel Hawthorne, The Scarlet Letter; Frederick Douglass, Narrative of the Life of Frederick Douglass; Herman Melville, Moby Dick or Billy Budd; Mark Twain, The Adventures of Huckleberry Finn; and Kate Chopin, The Awakening.
Fall
3 Credits

## THE ART OF POETRY (128)

Carl Sandburg defined poetry as "an echo asking a shadow to dance." This metaphor is intentionally elusive, challenging and graceful, like poetry itself. This course trains students to be attentive and resourceful readers through close analysis of poems. Students will study in depth a range of influential poets from the 17th through the 21st centuries, from John Milton, Anne Bradstreet, and William Wordsworth to Gwendolyn Brooks, Pablo Neruda, and Joy Harjo just to name a few. They will also learn the many forms that have influenced these poets, from the sonnet to the sestina, the villanelle to the ghazal. The course centers upon developing students' critical reading and writing skills and a working knowledge of literary terminology. In addition, students will have ample opportunity to experiment with composing original poetry of their own.
Fall
3 Credits

## RENAISSANCE LITERATURE: BLOOD, LUST AND BLOODLUST IN THE GOLDEN AGE OF ENGLISH LITERATURE (133)

This course investigates the ways in which the poetry and drama of the early modern period take on the problems of human psychology, gender and sexuality, race, religion and politics. The course examines writers such as Shakespeare, Johnson, Marlowe, and Webster as members of a thriving, competitive, and often subversive literary/theatrical community. In addition to developing students' critical reading skills, the course helps students to understand the complex historical issues underlying the origins of the modern world—our world. Texts may include: Edmund Spenser, The Fairy Queene; Christopher Marlowe, Doctor Faustus; William Shakespeare, Richard II; Ben Johnson, Volpone; John Webster, The Duchess of Malf; and John Donne, Songs and Sonnets.

## Fall

3 Credits

## ROMANCE TO REALITY: AN EXPLORATION OF MEDIEVAL LITERATURE (131)

 Not offered in 2020-2021
## SATIRE (124)

From early Roman poets Horace and Juvenal to contemporary writers Tina Fey and David Sedaris, satire has held a unique place in literature, lambasting the follies humanity and the pitfalls of society. In this course, students will read a range of satirists with the primary purpose of articulating the author's complex satirical vision and understanding how the satirist's formal construction is intentional for their aim. Students may expect to read Jonathan Swift, "A Modest Proposal" and Gulliver's Travels; Nathanael West, The Day of the Locust; Kurt Vonnegut, Slaughterhouse Five; Don Delillo, White Noise; George Orwell, 1984; and a number of shorter, fictional pieces and essays. Students can expect to produce both analytical and creative work to showcase their understanding.
Fall 3 Credits

## UTOPIA: THEORY AND LITERATURE (140)

Another world is possible-so say the utopians, along with a growing number of fellow dreamers. This course traces the utopian imagination from its beginnings in the early-modern period to its present-day incarnations as anarchist science fiction, Afro-futurist art, prison abolition writing, and more. Students will examine the work of writers and artists who have responded to moments of massive social change and systemic injustice through world-making projects in prose fiction and non-fiction, poetry, drama, film, and music. Topics to be explored include private property and the commons, work, land, indigenous history and coloniality, racism, gender and sexuality, mass incarceration, and climate change. Authors may include Thomas More, Karl Marx, Ursula K. Le Guin, N.K. Jemisin, Manjula Padmanabhan, Angela Davis, and Samuel R. Delany.
Fall 3 Credits

## THE WRITER'S CRAFT (134)

This course introduces students to the basic elements of craft needed to compose fiction, poetry, drama, and memoir: plot, characterization, point of view, dialogue, description, and style. Students will learn to express emotions and ideas through concrete images and to hone their own tools of observation and insight. In reading some of the best examples of modern and contemporary literature, students will gain a critical appreciation of literary technique. While attention is on the creative craft, students will engage in analytical writing as well, learning to analyze from the writer's perspective. In keeping with the workshop format, students will do writing exercises in class, keep a writer's notebook, and share their work with the group for helpful feedback.
Fall
3 Credits

## 19th CENTURY BRITISH LITERATURE (125)

In this course we explore the complex, often contradictory, and fascinating world of 19th century British Literature. Students immerse in a study of the Gothic style, Romanticism, and the Victorian novel. Through close study of the texts and literary criticism, students study changing attitudes toward science and religion, the rise of industry, the move from the country to the city, the role of women in society and in the domestic sphere, and the role of gender in the literary publishing world. Students engage in the habits of interactive reading, performing close textual analysis as well as self-analysis of reading habits. Texts may include: Charlotte Bronte, Jane Eyre; Charles Dickens, Great Expectations; H.G. Wells, The Time Machine; Bram Stoker, Dracula; Emily Bronte, Wuthering Heights; George Eliot, Silas Marner; and Oscar Wilde, The Importance of Being Earnest.
Spring 3 Credits

## REWRITING AMERICA (136)

The course examines the role that story-telling plays in the construction of America's historical record and national identity. Students reflect on this mythology through examining voices and perspectives often missing from the traditional narrative of America. In doing so, students explore identity through a variety of lenses, including race, class, ethnicity, and gender. They examine the ways that authors use non-linear narratives to enhance dialogue between the present and the past and between different cultural perspectives. The course encourages students to develop creative interpretations of the texts, and support their ideas with analytical depth and precision. Ultimately, students will emerge with a more complex vision of America, one that balances the wonders of the nation's legacy with the deep social and cultural scars seared into its past and present. Texts may include: Tommy Orange, There There; Junot Diaz, The Brief Wondrous Life of Oscar Wao; Toni Morrison, The Bluest Eye; and Julie Otsuka, When the Emperor was Divine.
Spring 3 Credits

## SHAKESPEARE (120)

William Shakespeare is arguably the most influential writer in the English language, and for good reason: his work not only tells timeless stories, but also offers unmatchable insights into the human condition, insights that are as relevant today as they were four hundred years ago. Students will examine aspects of Shakespeare's life and society, as well as the raucous, competitive theater culture in which he worked. Through the study of plays from each major genre, they will hone the skills required to appreciate his words and images, which are sometimes funny, bawdy, shocking or haunting, but always profound. The core work for the course is the great revenge tragedy Hamlet; other plays may include Henry V, Shakespeare's history about a wild child turned warrior king; Measure For Measure, perhaps his most provocative and subversive comedy; and The Winter's Tale, a late play about jealousy, loss and redemption set against a backdrop of fantasy and fairly tale. These explorations will be complemented by films, critical analyses, and dramatic exercises that explore techniques for "playing Shakespeare." The course provides invaluable preparation for doing serious critical analysis in virtually any field or period of English literature.

Spring 3 Credits

## THE NONFICTION ESSAY (149)

"As the word essay suggests, it's about trying something out, it's about an experiment." The essay, as psychotherapist and essayist Adam Phillips describes it, will be the focus of our reading and writing in this course. Through our own "experiments," we will work to achieve what all writers and readers do: affect and be affected by each other through the form and content of our words. Our reading material falls under five categories of writing we are likely to encounter in everyday public life: 1) interventions into existing discourses; 2) interviews or philosophical conversations; 3) personal writing, including observational pieces, letters, and creative non-fiction; 4) academic introductions; and 5) literary and cultural criticism. Authors may include James Baldwin, Jia Tolentino, Umberto Eco, Pauline Kael, and Zadie Smith. In addition to discussing the rhetorical strategies, ideas, and arguments of these texts, students will produce and workshop their own essays within these categories, focusing on questions of craft, style, structural logic, and audience and occasion. Students should expect a discussion- and workshop-based course that requires active engagement and open evaluation of their own writing at various stages.
Spring 3 Credits

## THE SHORT STORY (141)

Who doesn't love a great short story, the acknowledged foundation of American literature? More than any other genre, the short story launched and defines many of America's greatest writers. This course explores the relationship between the individual and society, tracing America's literary transformation from regionalism to the multicultural, global outlook of the twenty-first century. Stories examine such diverse topics as gender, race in America, war and peace, Southern gothic, futurism and dystopia, and the postmodern. Authors may include Edgar Allan Poe, Kate Chopin, Nathaniel Hawthorne, Zora Neale Hurston, Charles W. Chesnutt, Jean Toomer, Nella Larson, Willa Cather, F. Scott Fitzgerald, Ernest Hemingway, William Faulkner, James Baldwin, Kurt Vonnegut, Flannery O’Connor, Joyce Carol Oates, Philip Roth, Raymond Carver, Stephen King, Roxanna Robinson, Richard Ford, and Jamaica Kincaid.

Spring 3 Credits

## WORLD LANGUAGES

The program offers three modern languages and one classical language. In the Chinese, French, and Spanish programs, the goal is to prepare students to communicate in a language other than English while learning about the importance of the cultures of the world. Teachers stress active communication and require students to develop their listening, speaking, reading, and writing skills equally. Courses are conducted primarily in the target language, and active student engagement is essential. With this in mind, both the mid-year and final exams include listening comprehension and speaking portions. In Latin, students enhance their study of the fundamental vocabulary and grammar of the language with an immersion in major aspects of the mythology, history, and culture of ancient Rome, as well as with an introduction to etymology. Accordingly, all introductory work in Latin is designed to prepare students to read such authors as Caesar, Vergil, Catullus, Horace, Cicero and Ovid at the intermediate and advanced levels. In all four languages, levels may be combined (Chinese $2 / 2 \mathrm{H}$; French $5 / 5 \mathrm{H}$ ) if there is not enough enrollment to run separate courses.
Graduation Requirement: Students must successfully complete three consecutive courses in the same language at the Upper School. Most students take more than three years of one language, and, for the most selective colleges, four years of the same language is strongly recommended. Students may take more than one language. Students must earn a minimum of C-for S2 and C- for the final grade in the course in order to advance to the next level; otherwise, the student must repeat the course or successfully complete a summer course pre-approved by the Department Chair. Students in an honors-level course must earn a minimum of B (unless otherwise noted) and earn a department recommendation in order to proceed to the sequential honors-level course. It is rare for students in a non-honors modern language course (including level 1 ), even with a grade of A , to be recommended to move on to an honors-level course. Students new to MKA take a written placement test; in modern languages, there is also an oral component. Placement is determined by the demonstrated level of achievement.
Acceleration Policy: Students who wish to accelerate over the summer may do so only with the acknowledgement of their current teacher and the prior approval of the Department Chair. Any student who wishes to accelerate through the Upper School World Languages sequence must complete and submit a Course Acceleration Form in May. The Course Acceleration Form includes important information pertaining to this process and specific requirements for acceleration.

## CHINESE

CHINESE 1 (260)
This course introduces the basics of Mandarin Chinese, including information about, and the celebration of, festival traditions in Chinese culture. Students will begin by learning PinYin, the phonetic system, followed by the use of topical themes such as greetings, family and school life, and practical survival phrases to provide speaking opportunities. As the written Chinese language is based on ideographic characters, reading and writing will be introduced only when students are comfortable with listening and speaking skills. Instruction will be task-based through the use of role-play, songs and raps, picture cues, cartoons, and interview simulations. Students will learn more than 200 different Chinese characters and will learn how to write short paragraphs about themselves. Full Year

$$
6 \text { Credits }
$$

## CHINESE 2 (261)

## CHINESE 2 (262) HONORS

This course is a continuation of the work begun in Chinese 1. Students will be taught to express more detailed personal preferences in shopping, animals and pets, restaurant experiences, cooking, telling time, colors and clothing, emailing, locations, occupations and hobbies. About 300 more characters will be taught in addition to those learned previously. Students will be able to do more reading and to create short stories. More in-depth cultural studies will be offered, such as Chinese calligraphy and painting. In addition to the modes of instruction listed in Chinese 1, Chinese movies will provide topics for discussion. Students in the honors course will read short stories along with the occasional study of Chinese idioms and annotated Chinese proverbs.
Prerequisites for $\mathbf{2 H}$ : A in Chinese 1 and department recommendation

$$
\text { Full Year } \quad 6 \text { Credits }
$$

## CHINESE 3 (264) HONORS

This course continues to build upon the foundation of Chinese 1 and 2 . Beside the routine drills and the study of new vocabulary and sentence patterns, the course will include topics such as Chinese holidays, transportation, seasonal activities, vacation plans, student life, parent/child relationships, Chinese food, songs and legends. In this way, students will be introduced to Chinese social values and their philosophical foundation, with the hope of furthering their understanding of Chinese culture. In the honors-level course, additional readings will be required.

Prerequisites for $\mathbf{3 H}$ : B in Chinese 2 Honors and department recommendation
Full Year
6 Credits

## CHINESE 4 (265)

## CHINESE 4 (266) HONORS

This course continues to build on the foundation of Chinese 1,2 , and 3 . Topics will include discussing seasons and the climate, making appointments and visiting the doctor, arranging entertainment, playing sports, finding rental properties, and discussing housing conditions and international travel. Besides vocabulary and grammar, students will learn how to negotiate in Chinese and problem solve in various situations. The course material will be delivered through songs, rhymes, movies, and reading material. In the honors-level course, additional readings and creative writing will be required.
Prerequisites for 4 H : B in Chinese 3 Honors and department recommendation
Full Year
6 Credits

## CHINESE 5 (270)

## CHINESE 5 (271) HONORS

This course aims to increase the spontaneity and fluency of speaking and more advanced comprehension of written Chinese. Students learn how to talk about feelings, personal characteristics, car accidents, dating and wedding traditions and college applications. Students will engage in in-depth discussions on a variety of current event topics from China. Students will also use Chinese contemporary literature of different genres to practice reading skills. Chinese values and ideas will be introduced through learning ancient idioms and modern literary expressions. The practice of using character lists for drilling and learning will continue as in previous levels. For assignments and assessments, students at the honors level will be expected to apply their knowledge at a more advanced level in problem solving through oral communication and creative writing.
Prerequisites for 5 H : A in Chinese 4 or B in Chinese 4 Honors and department recommendation
Full Year
6 Credits

## ADVANCED PLACEMENT CHINESE LANGUAGE AND CULTURE (272)

The course serves simultaneously to review and solidify students' knowledge of vocabulary and grammatical structures learned through previous courses and to introduce a more advanced level of speaking, reading, and comprehension activities. Students will learn topics through current events from news media and online resources for journaling. Authentic Chinese short stories from the awarding winning author, Liu Yong, will be selected as reading material for comprehension and creative writing. Movies based on contemporary life in China and Taiwan will be viewed to improve listening and oral proficiency.
Prerequisites: $\quad \mathrm{B}+$ in Chinese 4 Honors and department recommendation
Full Year 6 Credits

## FRENCH

## FRENCH 1 (211)

This course provides an introduction to the French language and to the cultures of the Francophone world. The text and the online resources offer practice of vocabulary, grammatical structures, and cultural topics. In addition, the online resources offer drills to hone students' pronunciation skills. The focus of the course is building vocabulary, using basic grammar properly, and developing basic fluency. Students will use vocabulary in context in projects, dialogues, and oral presentations. They will also write short compositions applying the material they have learned.
Full Year
6 Credits

## FRENCH 2 (212)

## FRENCH 2 (214) HONORS

This course offers a continuation of the study of French language and Francophone cultures. The major differences between the two are the pace and depth of the material studied, the length of compositions, the complexity of oral presentations, and the amount of time spent reviewing basic structures. Through oral and written work, students will continue to build vocabulary, increase fluency, and refine writing skills. New grammatical concepts and verb tenses will be introduced, and readings will be discussed in French. Students will use vocabulary in context to create original projects and presentations.
Prerequisites for $\mathbf{2 H}$ : A in French 1 and department recommendation
Full Year 6 Credits

## FRENCH 3 (215)

## FRENCH 3 (217) HONORS

This course provides a continuation of the study of French and serves as a transition course to upper-level offerings. Students will study more advanced structures and complex vocabulary in context, and they will read longer selections. The differences between the two levels include the difficulty of the readings, the complexity of original work, and the amount of review of basic and intermediate structures. Students will have opportunities to use the language in many ways; assignments will include literary analysis, creative writing, and role playing of realistic scenarios. These exercises will help students to improve their confidence and increase their fluency.

## Prerequisites for $\mathbf{3 H}$ : B in French 2 Honors and department recommendation

Full Year 6 Credits

## FRENCH 4 (219)

This course is a continuation of French 3, and as such, students will review some of the structures covered in the previous year, while being introduced to more complex and sophisticated grammatical concepts. Special emphasis will be placed on recycling and integrating elements from all levels, so that by the end of the year, students will be able to read advanced texts and use a variety of structures to express themselves in writing and speaking. In addition to reading and writing, students will continue to hone their speaking and listening skills in class discussions, presentations, and audio activities.

$$
\text { Full Year } \quad 6 \text { Credits }
$$

## FRENCH 4 (223) HONORS

In this course, students will work to develop their ability to read, write, listen, and speak in French with fluency, accuracy, and confidence. During the first semester, students will use film, non-fiction, and literary excerpts to explore the cultures of a variety of French-speaking areas of the world. Through these resources, they will consolidate and expand their knowledge of advanced grammar structures while practicing all four language skills. The second semester centers on themes like War \& Peace, Advertising \& Marketing, and Sports \& Nationalism.
Prerequisites: B in French 3 Honors and department recommendation
Full Year 6 Credits

## FRENCH 5 (222)

## FRENCH 5 (220) HONORS

This course offers an opportunity to increase students' confidence and improve their fluency in spoken and written French. During the first semester, students will read an adapted version of Voltaire's Candide. Throughout the semester, advanced grammar topics will be reviewed and reinforced and practiced via the content of the course. In the spring semester, students will read Le Petit Prince and engage in frequent written and oral assignments to continue to work on their master of written and spoken French. The honors course differentiates itself through the expectations in sophistication of the written work as well as the use of more complex grammatical structures and expanded vocabulary.
Prerequisites for 5H: A in French 4 or B in French 4 Honors and department recommendation
Full Year
6 Credits

## ADVANCED PLACEMENT FRENCH LANGUAGE AND CULTURE (225)

The goal of this course is to facilitate the study of French by engaging in an exploration of culture and promoting fluency and accuracy in language use. Students will develop an awareness and appreciation of cultural products, practices and perspectives, in both contemporary and historical contexts. The content of the course is designed around six themes, and incorporates a wide variety of topics, in an attempt to integrate language, content and culture.
Prerequisites:
B+ in French 4 Honors and department recommendation
Full Year 6 Credits

## LATIN

## LATIN 1 (280)

This course introduces students to the fundamental vocabulary and grammar of the language. As a part of this introduction, students will review the fundamental vocabulary and grammar of English and will closely examine the relationship between the two languages. In addition, students will complement their work in the language with an introduction to some of the major aspects of the mythology, history, and culture of ancient Rome.
Full Year
6 Credits

## LATIN 2 (281)

## LATIN 2 (282) HONORS

This course continues the study of the fundamentals of the Latin language. During the course of the year students will develop their ability to read, translate, and analyze short passages of Latin in both prose and poetry. In addition to their work in the language, students will continue to learn about the mythology, culture, and history of Rome and the ancient world. The pace of instruction and coverage in the honors course is significantly faster in preparation for the study of passages of authentic prose and poetry in Latin 3 Honors.

## Prerequisites for $\mathbf{2 H}$ : A in Latin 1 and department recommendation Full Year 6 Credits

## LATIN 3 (283)

In this course, students will continue to learn essential and more advanced topics of Latin grammar. They will learn to translate sentences and passages of increasing difficulty. Over the course of the year, students will learn about additional topics in the mythology, culture, and history of Rome and the ancient world.
Full Year
6 Credits

## LATIN 3 (284) HONORS

In this course, students will continue to learn the major and more advanced topics of Latin grammar. They will learn to translate sentences and passages of increasing difficulty. Students will learn about additional topics in the mythology, culture, and history of Rome and the ancient world. In the second semester, students will study authentic Latin literature. They will study Latin prose and poetry, as well as look more closely at elements of theme and style, in selections from Caesar's Bellum Gallicum.

| Prerequisites: | B in Latin 2 Honors and department recommendation |
| :--- | :--- |
| Full Year | 6 Credits |

LATIN 4 (285)

## LATIN 4 (286) HONORS

In this course, students will continue to read Latin authors, review essential grammatical topics, learn advanced grammatical topics, study Roman history, and work on essay writing skills and on their ability to translate texts independently. They will also study Roman history from the earliest beginnings through the eventual decline of the empire, and will develop their ability to express original interpretations of Latin texts in English. Students will create presentations on Roman history. Authors will vary from year to year, but may include Caesar, Vergil, Livy, and Catullus, among others.
Prerequisites for 4 H : A in Latin 3 or B in Latin 3 Honors and department recommendation Full Year 6 Credits

LATIN 5 (287)

## LATIN 5 (288) HONORS

In this course, students will read selections from various Latin authors and will continue to develop their translation and interpretation skills. Students will also have the opportunity to read in translation and to explore topics in ancient culture. For assignments and assessments, students at the honors level will be expected to read, interpret, and analyze more text in Latin; they will also complete a separate research writing assignment.
Prerequisites for $\mathbf{5 H}$ : A in Latin 4 or B in Latin 4 Honors and department recommendation Full Year 6 Credits

## ADVANCED PLACEMENT LATIN (291)

In this course, students will complete the readings on the AP syllabus in preparation for taking the AP exam at the end of the year. Students will translate the required selections from books 1, 4, 5, and 6 of Caesar's Gallic War and from books 1, 2, 4 and 6 of Vergil's Aeneid. In addition, students will read both works in their entirety in English. Students will continue to hone their reading comprehension, translation, contextualization, and analytical skills. Students will also practice their sight-reading skills, all in preparation for taking the AP exam at the end of the year.
Prerequisites: $\quad \mathrm{B}+$ in Latin 3 Honors and department recommendation Full Year 6 Credits

## POST-AP LATIN LANGUAGE AND CULTURE (298)*

This course provides students with the opportunity to pursue their study of language, literature, and culture beyond the AP level. Sectioning for this course will be tailored to the needs of the students: typically, the course will be offered for individual languages. Students will collaborate with each other and with their teacher to design a curriculum which reflects their respective backgrounds, experiences, and interests. This curriculum, in turn, provides the framework for an independent research project during the second semester. Students will present their projects at the end of the course. The course may be repeated for credit.
*This course is being offered in the 2020-2021 school year.
Prerequisites: $\quad \mathrm{B}$ in an AP Latin course and department recommendation
Full Year 6 Credits

## SPANISH

## SPANISH 1 (231)

This course provides a thorough introduction to Spanish. Students will learn conversational vocabulary, the basic structure of the language, and the present and past tenses. Reading and writing in Spanish are integral parts of the course, but in class, the oral/aural aspects of the language will be emphasized. Students will practice speaking Spanish in pairs and groups, doing skits and role plays, and talking with and listening to the teacher.

## Full Year

6 Credits

## SPANISH 2 (232)

## SPANISH 2 (234) HONORS

This course offers a continuation of the language study begun in Spanish 1. The major differences between the two levels are the pace and depth of the material covered, as well as expectations surrounding the independent production of original work. The curriculum will help students to hone their reading, writing, listening, and speaking skills. This course stresses oral communication to provide an understanding of the verb tenses and grammatical concepts presented. Attention is also given to selected readings, which students discuss in class.
Prerequisites for $\mathbf{2 H}$ : A in Spanish 1 and department recommendation
Full Year
6 Credits

## SPANISH 3 (235)

## SPANISH 3 (237) HONORS

This course reviews basic grammar structures and offers opportunities to build vocabulary. Students will begin to learn advanced structures and will work to develop vocabulary in a conversational context. They will have opportunities to make oral presentations, read excerpts of classic Hispanic literature, and understand the history and cultures of select Spanish-speaking regions. Expectations at the two levels differ in students' use of advanced structures, literary analysis, and general pace of the course. The honors-level course includes more complex contexts, requires deeper creative analysis of history, literature and film, and requires students to read authentic excerpts of classical and contemporary Hispanic literature.
Prerequisites for $3 \mathbf{H}$ : B in Spanish 2 Honors and department recommendation Full Year

6 Credits

## SPANISH 4 (239)

In this course, students will explore historic, geographic, and societal themes of Latin America and Hispanic immigration to the U.S. through a series of texts, projects, and films. In this context, students will review intermediate structural topics and will learn some advanced structures. In addition, students will continue to further develop their writing and oral skills.
Full Year
6 Credits

## SPANISH 4 (244) HONORS

In this course, students will prepare compositions, presentations, and oral reports while engaging in discussions about personal and cultural themes. Students will study a series of topics including personal relationships, life in cities, mass media, and politics, using both the textbook and numerous authentic sources to gain insight into Spanish and Latin American life and culture. Advanced grammar points are reviewed as students work regularly to improve their writing and speaking skills.

| Prerequisites: | B in Spanish 3 Honors and department recommendation |
| :--- | :--- |
| Full Year | 6 Credits |

SPANISH 5 (243)

## SPANISH 5 (240) HONORS

This course, conducted as seminars in Spanish, offers an opportunity to increase students' confidence and improve their fluency in spoken and written Spanish. Students will study current events, history, and culture through a variety of resources such as newspaper articles, literature, and film. Students will be expected to read, analyze, and discuss in Spanish. Students will also be expected to write compositions and essays, as well as create projects. Advanced grammar topics are taught, reviewed, and practiced via the content of the course. The honors-level course differentiates itself by expanding the curriculum to cover a more in-depth analysis of the content of the course
Prerequisites for 5H: A in Spanish 4 or B in Spanish 4 Honors and department recommendation
Full Year 6 Credits

## ADVANCED PLACEMENT SPANISH LANGUAGE AND CULTURE (242)

The goal of this course is to facilitate the study of Spanish by engaging in an exploration of Culture while promoting fluency and accuracy in language use. While the course does incorporate some grammar review, the focus is on developing real-life skills and the skills necessary for successful completion of the AP examination in May. Students must feel comfortable reviewing grammar on their own. Students will develop an awareness and appreciation of cultural products, practices and perspectives, in both contemporary and historical contexts. The content of the course is designed around six themes and a wide variety of sub-topics, as determined by the College Board, in an attempt to integrate language, content and culture.
$\begin{array}{ll}\text { Prerequisites: } & \text { B+ in Spanish } 4 \text { Honors and department recommendation } \\ \text { Full Year } & 6 \text { Credits }\end{array}$

## POST-AP FRENCH \& SPANISH LANGUAGE AND CULTURE (299)

This course is not being offered in the 2020-2021 school year.

To foster independent thinking and a global perspective, the History Department attempts to engender within students a historical perspective that prepares them to participate in and contribute positively to society; an awareness and understanding of current social issues such as sexism, racism and socialization; a respect for diversity; and essential social study and historical analysis skills.

Graduation Requirement: Students are required to take Early World History, Modern World History, and United States History. During the eleventh grade, students complete a major research paper and participate in the three-day junior class trip to Washington, D.C. All students are encouraged to select one or more of the upper-level electives to fully prepare for college and life beyond.

## EARLY WORLD HISTORY (308)

This course looks at the economic, political, social, and cultural development of world civilizations in the ancient and medieval worlds to answer two fundamental questions: "How do cultures organize and develop?" and "How do cultures interact?" Through the use of primary and secondary sources, students will study societies found in areas of the world including Africa, Central and South America, China, India and Greece. This course will take a thematic approach and will focus on a comparative analysis of these areas. There will also be a strong emphasis on essay writing, and a number of units will provide opportunities for students to develop and apply research skills. Students will complete a research paper during the second semester.
Full Year 6 Credits

## EARLY WORLD HISTORY (309) HONORS

This course covers the same thematic topics as the non-honors course, but in greater depth and complexity. The honors course shares common reading with the non-honors course, but there will be additional reading of both primary sources and analytical essays. Students in the honors course will complete the same major research projects, but will have additional analytical writing assignments. Significant class time will be devoted to discussion. Students enrolled in this course must have a strong ability to think analytically and reflectively; to understand and interpret complex sources, both primary and secondary; to articulate complex ideas verbally and in writing; and to share their passion and curiosity for ancient world history.

| Prerequisites: | A- in 8 th grade history and department recommendation |
| :--- | :--- |
| Full Year | 6 Credits |

MODERN WORLD HISTORY (330)
Who is a citizen, and how much power should a state have over its citizens? What enables countries to develop economically, and who gains or loses from that development? This course focuses on two themes, the formation of the modern state and the evolution of the modern global economy, to answer questions such as these and tell the story of the modern world in which we live. Looking at a diverse range of case studies, students will study the ways in which individuals' relationships to their government and to the world economy have been shaped by the historical development of institutions over time. Case studies will include countries from Europe, Asia, Africa, and Latin America. As part of this course, students will complete a spring research paper.
Full Year 6 Credits

This course covers the same thematic topics as the non-honors course, but in greater depth and complexity. Beyond the common textbook, there will be a considerable amount of additional reading of primary sources and historiographical and analytical essays. Students will complete the same major research papers, as well as additional analytical writing assignments. Significant class time will be devoted to discussion of multiple perspectives on issues from modern world history. Students enrolled in this course must have a strong ability to think analytically and reflectively; to understand and interpret complex sources, both primary and secondary; to articulate complex ideas verbally and in writing; and to share their passion and curiosity for history.
Prerequisites: A in Early World History or B+ in Early World History Honors, and department recommendation
Full Year 6 Credits

## UNITED STATES HISTORY (344)

This course explores the important themes, trends, people and events in modern United States history from the stirrings of the American Revolution to the traumas of the Vietnam War. The course will feature 4 guiding themes - founding documents; business, labor, and capital; race and civil rights; and American foreign policy - to shape the study of American History. Students will use the aforementioned themes as a means of not only studying the important people, places and events that shaped American History, but also as a way of uncovering and understanding important trends and valuable lessons for their lives as American citizens today. Through analysis of historical events, as well as of historical themes and concepts, students will develop positions on significant historical questions by means of group work, lecture, class discussions, in-class writing, and essays. To improve the development of writing skills, students will frequently write essays of varying lengths. All students will complete the Junior Thesis, a major, original research paper that builds upon the research skills developed in the ninth and tenth grades. A three-day field trip to Washington, D.C. is a course requirement.
Full Year
6 Credits

## UNITED STATES HISTORY (346) HONORS

The Honors level of U.S. History covers the same thematic approach as the non-Honors course, but with greater breadth, depth, and complexity. Beyond the common readings, there will be a considerable amount of additional reading of historiographical and analytical essays. In addition to a number of smaller analytical writing assignments, students will also complete a major, in-depth research paper - the Honors Thesis. Based upon faculty evaluation, superior theses can earn transcript recognition for "Research Distinction" or "High Research Distinction," and may be selected for publication in The Primary Source during senior year. Significant class time will be devoted to discussion of multiple perspectives on issues from U.S. History, to help students develop a deeper understanding of the interpretive debates among historians. Students enrolled in this course must have a strong ability to think analytically and reflectively; to understand and interpret complex sources, both primary and secondary; to articulate complex ideas verbally and in writing; and to share their passion and curiosity for history.
Prerequisites: A in Modern World History or B+in Modern World History Honors, and department recommendation
Full Year 6 Credits

## ELECTIVES

ECONOMICS (312)
Every person's daily actions and decision-making process can be analyzed through major economic principles. Students will investigate the guiding principles of economics through the eyes of an investor, a consumer, a worker, and a citizen. Students will have an opportunity to develop their understanding of critical economic concepts such as opportunity cost, compounding interest, GDP, inflation, debt, monetary and fiscal policy, among others. Students will also apply these concepts on project-based assessments based on current events in the global economy. Students will learn the importance of balancing income and expenses and maintaining a responsible outlook on financial conditions. By the end of the course, students will gain a basic knowledge of economic principles, financial markets, and the global economy and will develop the skills to be conversant in major economic issues, policies, and debates. Students will have the opportunity to further develop their economic knowledge by participating in guest speaker workshops, alongside students in the honors section of the course.

$$
\text { Full Year } \quad 6 \text { Credits }
$$

## ECONOMICS (314) HONORS

This course examines major microeconomic and macroeconomic principles at a rapid pace. A key focus in this course is the operation of financial markets and capital formation. In addition to traditional economic principles, students will learn fundamental financial concepts. Students are also required to be conversant in topical economic news every class period. An integral part of this course will be participation in a stock market simulation game where each student is given an equal number of hypothetical dollars to invest. Students will research, trade, and track their portfolio during the year; this forms the basis upon which students are introduced to investment concepts. Guest speakers will share their perspectives; students must attend these presentations, which may occur at 7:00 a.m. Class participation will be stressed, and students will be graded on the quality of their daily contribution as well as periodic oral presentations. Students will write an in-depth research paper in the first semester that explores the global financial crisis of 2007-2008. Students will also complete an independent project (culminating assessment) at the end of the second semester.

$$
\begin{array}{ll}
\text { Prerequisites: } & \begin{array}{l}
\text { B+ in an honors precalculus class or co-enrollment in Calc H/AP Calc; for seniors, } \\
\text { B+in U.S. History or B in the honors course; for juniors, A in Modern World }
\end{array} \\
& \begin{array}{l}
\text { History or B+ in the honors course and co-enrollment in U.S. History Honors; and } \\
\text { department recommendation }
\end{array} \\
\text { Full Year } & \begin{array}{l}
6 \text { Credits }
\end{array}
\end{array}
$$

## POLITICAL THEORY (315) HONORS

This course traces the evolution of political thought from the ancient world to the present day, including both western and non-western theorists. Students will examine ideas regarding human nature and the nature of the state, as well as communities in general. Beginning with a foundation in ancient political thought, the course proceeds to an overview of seminal modern thinkers. A key recurring theme will be defenses and critiques of democracy in general, and liberal democracy in particular. Other concepts covered include the role of virtue in politics, the idea of the social contract, and the relationship between the individual and the state. While there are projects and some tests, essays are the primary mode of assessment. Students are expected to keep themselves abreast of current events and are encouraged to relate the ideas covered to events in the world today.

[^0]AMERICAN AND COMPARATIVE GOVERNMENT (310) HONORS
This course provides students with an understanding of American government and related institutions, as well as other governments from across the world. In the first semester, students will study American government explicitly, examining the founding principles, major institutions, bureaucratic systems, and related private structures. Students will also investigate the relationship between values and voting. Students will work with such primary documents as The Federalist Papers, the U.S. Constitution, and Supreme Court cases, as well as other texts. In the second semester, students will undertake a comparative study of the governmental institutions and processes of other nations. Students will better understand how to situate American democracy on the spectrum of governmental types. Among those we may study are China, Iran, Mexico, Nigeria, and Russia. We will end the year with students presenting papers at a symposium on a topic of importance.

| Prerequisites: | For seniors, B+ in U.S. History or B in the honors course; for juniors, A in Modern World <br> History or B+ in the honors course and co-enrollment in U.S. History Honors; and <br> department recommendation |
| :--- | :--- |
| Full Year | 6 Credits |

## THE HOLOCAUST, GENOCIDE, AND THE PURSUIT OF JUSTICE (342)

How did the Holocaust happen? What was responsible for the rise of Nazism in Germany and its subsequent spread throughout Europe? This course examines the historical events and ethical questions surrounding the Holocaust, as well as other instances of genocide around the world and the pursuit of justice in the aftermath of genocide. Students will analyze the chain of events in Europe from the conclusion of World War I through the major phases of the Holocaust. After establishing a foundational vocabulary, students will explore other instances of genocide, including Armenia, Cambodia, Rwanda, Bosnia and the Sudan, and then consider how the international community can ensure justice for the victims and combat future genocides. They will also consider such key issues as historical causation, the human toll of the Holocaust, and the devastating impact of hatred and violence. Assessments will include journal reflections, reaction papers and essays, and individual and class projects. Visiting speakers and a field trip will further enhance student understanding.

> Full Year

6 Credits

## JAPANESE HISTORY (334)

This course blends a study of Japanese cultures and traditions with an overview of Japan's history. The semester begins with a study of early Japan's integration of Chinese culture in areas such as: religion, government, society, and architecture. After establishing the foundations of early Japanese culture, this course will focus on key time periods such as the Tokugawa Shogunate and Meiji Restoration. Films such as Akiro Kurosawa's Yojimbo and The Last Samurai, as well as books such as Zen in the Art of Archery supplement readings in the text. These sources also provide further insights into Japanese culture such as the way of the Samurai and Zen Buddhism. Students will also have the opportunity to take some lessons in a martial art.

## Fall

3 Credits

## CHINESE HISTORY (333)

This course takes a novel approach to the four thousand year story of the Chinese people. By reading the biographies of some of China's most interesting individuals, this course seeks to access some of the key values and ideas that have developed over time. Students will learn about the moral system of Confucius, the special branch of Buddhism founded by Hui Neng, the meeting between Genghis Khan and a Daoist monk, and the particular appeal of Mao's communist ideas to the Chinese people. Students will also examine elements of Chinese culture and major points of etiquette. They will practice tai chi and some basic Daoist meditation techniques. The curriculum will be supplemented with such Chinese films as: Crouching Tiger, Hidden Dragon and Eat, Drink, Man, Woman.
Spring 3 Credits

From the mid-50s to the mid-70s, catalytic forces ignited seminal change in our nation's historic struggles with racism, sexism, and classism. In addition to America's volatility over racism, author Flora Davis bluntly wrote that the women's movement "went off like a bomb." What conditions and emotions triggered this storm? What were the costs of standing up? What efforts were effective, and which were not? How did internal struggles affect organizational success? The first semester will focus on the struggles of African-Americans and women, and the second semester will address the efforts of Hispanics, LGBTQ rights, and current developments related to our study. Students will analyze the lasting impact of this period on racial and ethnic minorities, women, the LGBTQ community, and the conscience of our country at large. Class resources will include written and artistic works, film and documentaries, and even student interviews with primary sources. Students also will pursue independent projects of particular movements of interest.
Full Year
6 Credits

## LITERATURE AND HISTORY OF NEW YORK CITY (542)

This course, an interdisciplinary offering, is open to seniors. Students must decide whether to apply the 6 credits to English or History, or they may apply 3 credits to each department. PLEASE REFER TO THE INTERDISCIPLINARY SECTION OF THE CURRICULUM GUIDE TO READ THE FULL COURSE DESCRIPTION.

Full Year

6 Credits

## MATHEMATICS \& COMPUTER SCIENCE

The department's mission is to develop in each student a love of mathematics and computer science, confidence in their abilities and a sense of responsibility for their academic achievement. The mathematics and computer science curricula combine the best of the rich cultural tradition of both disciplines with applications to modern problems. While preparing students for the most rigorous college programs, the curricula also expose them to the history and beauty of both disciplines. The wide range of course offerings enables students to complete four years of mathematics at the Upper School. Ability grouping allows students to be successful as well as challenged. The pace of the course and the depth of study of various topics differ between courses offered at multiple levels.

Graduation Requirement: Students must complete three years of mathematics at the Upper School. A minimum grade of C- is required to advance to the next sequential course. Any student earning below a C- in a sequential course must either repeat the course the following year or enroll in an approved summer school program and earn a minimum grade of C- in the course of study. Students may not take the same course twice at different levels, such as Geometry and Geometry Honors.

Acceleration Policy: Students entering ninth grade from MKA's Middle School who wish to accelerate through Geometry may do so only with the recommendation of their current MKA teacher and the prior approval of the Middle School Department Chair. All incoming ninth graders wishing to accelerate through Geometry must obtain approval from the Upper School Department Chair for their specific summer course in advance. Any student who wishes to accelerate through Geometry must complete and submit a Course Acceleration Form in May. The Course Acceleration Form includes important information pertaining to this process and specific requirements for acceleration. Courses taken prior to ninth grade do not appear on the transcript and do not count towards the graduation requirement.

Acceleration in computer science may be possible for students that already have extensive background or experience in the subject. Students interested in pursuing these options should contact the Upper School Department Chair. Any student who wishes to accelerate in computer science must complete and submit a Course Acceleration Form in May. The Course Acceleration Form includes important information pertaining to this process and specific requirements for acceleration.

The following chart shows possible sequences a student may take during grades 9-12; it does not display all possible course sequences. Enrollment in each course is dependent upon fulfillment of all prerequisites.

## Course Progression



## GEOMETRY (411)

This course provides the core of the general concepts and theorems of Geometry. While formal two-column and coordinate proofs are introduced, emphasis is placed on the development of logical and evidence-based thinking. The traditional concepts concerning lines, angles, planes, polygons, congruence and similarity are connected to real-world applications and careers. The course also covers topics such as areas, surface areas and volumes of solids. Practice in applying concepts is strengthened by spiral review and occasional references to SAT-formatted questions. The goal of the course is to build a solid understanding of the fundamentals of Geometry.

## Prerequisite: Algebra 1

Full Year 6 Credits

## GEOMETRY (412) HONORS

This course begins with an introduction to the terms and fundamental concepts in the field of Euclidean Geometry. Using these building blocks throughout the year, students derive powerful theorems and develop an understanding of geometric concepts. They learn to compose formal proofs for the first time. Composing formal proofs promotes an understanding of the rigor required when working in a deductive system. Students apply Algebra 1 skills to solve challenging problems in a geometric context. Topics studied include parallel and perpendicular lines; triangles, quadrilaterals, and other polygons; congruent and similar figures; circles; area, surface area and volume; and trigonometry.

Prerequisites: $\quad \mathrm{B}+$ in Algebra 1 and department recommendation Full Year 6 Credits

## ALGEBRA 2 (421)

This course includes the study of linear, quadratic, polynomial, radical, exponential, logarithmic, and rational functions. Students will solve equations related to each type of function as well as graph the functions using transformations and find function inverses. Modeling using linear, quadratic, and exponential data is also explored. Algebraic skills such as simplifying rational expressions and evaluating and simplifying expressions with radicals and rational exponents are reviewed and strengthened. Students will learn about the properties of logarithms and apply them to solving exponential and logarithmic equations.
Prerequisite: Geometry
Full Year 6 Credits

ALGEBRA 2 (422) HONORS
This high level, rigorous course begins with a concentrated study of the algebraic properties of powers and radicals, building upon a thorough summer assignment review of some key Algebra 1 topics required for success in this course. Students will then move rapidly into a study of linear equations, linear data models, and linear relations. Techniques of factoring, graphing parabolas, solutions of quadratic equations, and their applications are also explored. Other topics include polynomial division, the zeros of higher degree polynomials, rational functions, exponentials, and logarithmic functions. Emphasis is placed on learning how to graph equations by finding $x$ - and $y$-intercepts and understanding how coefficients and other constants transform parent functions into the given function. Towards the end of the course The Fundamental counting principle and probability are introduced. This course prepares students for Precalculus Honors and potentially Advanced Precalculus Honors depending upon performance.
Prerequisites: $\quad \mathrm{B}+$ in Geometry Honors or A in Geometry; B+ in Algebra 1; department recommendation Full Year 6 Credits

## ADVANCED ALGEBRA 2 (423) HONORS

This rigorous, fast-paced course emphasizes the higher order thinking and problem-solving skills required to be successful in advanced upper-level math courses. Students complete an in-depth summer assignment review of core Algebra 1 topics to ensure complete mastery of core skills required for success in this course. Students will investigate the properties and graphs of a variety of mathematical functions - linear, quadratic, polynomial, radical, exponential, logarithmic, and rational. Students will move rapidly into a concentrated study of linear systems, matrices, vectors, fundamental counting principles, and probability. Students will also learn to analyze data using linear, quadratic, and exponential models.
Prerequisites: A in Geometry Honors; A- in Algebra 1; department recommendation
Full Year 6 Credits

## PRECALCULUS (431)

This course focuses on the main characteristics of a function and its graph, and the applications of these concepts to relevant everyday topics. Highlighted functions include quadratic, higher-degree polynomial, rational, exponential, logarithmic, trigonometric, and conic functions. Students will learn rigid and non-rigid transformations of these functions, combinations and compositions of functions, and inverse functions. Students will also be introduced to the basic rules and applications of probability, permutations, combinations, and finite/infinite arithmetic/geometric sequences and series.

## Prerequisite: Algebra 2

Full Year 6 Credits

## PRECALCULUS (429) HONORS

In this course, students complete a summer assignment review of Algebra 2 Honors topics in preparation for the various topics in math analysis that are required for learning calculus. The course begins with an in-depth study of trigonometric functions and their inverses, including verifying identities, solving general triangles, and solving trigonometric equations. In the second semester, topics include the study of analytic geometry, parametric equations, vectors and polar coordinates. Students may also study the concept of a limit using mathematical sequences and series. As time permits, limits and derivatives of functions may also be introduced.

| Prerequisites: | B- in Advanced Algebra 2 Honors, B in Algebra 2 Honors or A in Algebra 2 and <br> department recommendation |
| :--- | :--- |
| Full Year | 6 Credits |

## ADVANCED PRECALCULUS (428) HONORS

This rigorous, fast-paced precalculus/calculus course is a prerequisite for AP Calculus AB/BC. Students complete an in-depth summer assignment review of core Algebra 2 Honors topics in preparation for an introduction to limits. This is followed by a concentrated study of trigonometric functions and their inverses including verifying identities, solving general triangles, and solving trigonometric equations. Additional topics include analytic geometry, sequences and series, parametric equations, vectors and polar coordinates, as time permits. In the second semester, students begin the study of calculus using mathematical sequences and series to revisit and extend the concept of a limit. Students will move rapidly on to an in-depth study of differentiation techniques and applications, which must be mastered fully in preparation for $A P$ Calculus $A B / B C$.

[^1]This introductory course in statistics provides students with a strong statistical base that is applicable to many disciplines and fields of study. Throughout the course, students will apply their knowledge through self-selected projects that highlight the concepts they have learned. Students will begin by focusing on the different methods of collecting data. After data is collected, students will study the numerous ways of summarizing, analyzing, and graphically displaying their data. In addition, students will learn how to interpret real-world data in meaningful ways using appropriate statistical language and vocabulary.

$$
\begin{array}{ll}
\text { Prerequisite: } & \text { Algebra 2; students may not take both Statistics and AP Statistics at MKA } \\
\text { Full Year } & 6 \text { Credits }
\end{array}
$$

## ADVANCED PLACEMENT STATISTICS (443)

This course is designed to utilize students' analytical writing skills with the purpose of conducting statistical investigations. This course emphasizes communication using appropriate statistical language and vocabulary in order to prepare students for the Advanced Placement exam. Students will analyze sampling design, experimental design, and sources of bias. The first semester focuses on descriptive statistics, where students will learn how to effectively summarize data using appropriate written, numerical, and graphical techniques. Other topics include investigating and applying a variety of probability models. The second half of the course focuses on applying the many methods of statistical inference, including confidence intervals and hypothesis testing.
$\begin{array}{ll}\text { Prerequisites: } & \begin{array}{l}\text { A- in Precalculus Honors, B- in Advanced Placement Honors, B in Calculus Honors, } \\ \text { B- in AP Calculus AB, or B- in AP Calculus AB/BC, and department recommendation }\end{array} \\ \text { Full Year } & 6 \text { Credits }\end{array}$

## CALCULUS (439)

This course is intended for students who want to learn some of the practical applications of calculus while increasing their understanding of the underlying mathematical concepts. Topics include limits, differentiation, and integration. Functions studied during the year include polynomial, rational, trigonometric, exponential and logarithmic. This course will provide students the opportunity to refine their algebra skills and to develop a deeper understanding of functions.
Prerequisites: B- in Precalculus and department recommendation
Full Year $\quad 6$ Credits

## CALCULUS (440) HONORS

This course is intended for students who want to learn the practical applications of traditional calculus while understanding the mathematical concepts underlying the techniques they have acquired. Students study nearly all the topics covered in a one-semester, college-level calculus course in a non-AP setting. First semester topics include limits at a point, derivatives, differentiation techniques, and the application of derivatives. Second semester topics include antiderivatives, definite and indefinite integrals, integration techniques, area bounded by curves, and the volume of rotational solids. Functions studied during the year include polynomials, rational functions, exponentials, logarithms and trigonometric functions.
Prerequisites: Advanced Precalculus Honors or B- in Precalculus Honors, and department recommendation Full Year 6 Credits

## ADVANCED PLACEMENT CALCULUS AB (442)

A formal study of limits and continuity provides the foundation for the study of differential and integral calculus. The major emphasis of this course is to hone a clear, intuitive understanding of the concepts. Students will develop facility with the elementary techniques of calculating derivatives and integrals of frequently encountered algebraic and transcendental functions. Applications include curve-sketching techniques; motion along a straight path; related rates; extreme value problems; and the computation of area and volume.
Prerequisites: $\quad \begin{aligned} & \text { B- in Advanced Precalculus Honors or A- in Precalculus Honors, and department } \\ & \text { recommendation }\end{aligned}$
Full Year 6 Credits
ADVANCED PLACEMENT CALCULUS BC (449)
This course covers all topics listed in the current Advanced Placement BC Calculus syllabus. In conjunction with Advanced Placement Calculus AB, it is equivalent to two semesters of first-year college calculus. Major topics include limits, integrals and their applications, techniques of integration, improper integrals, infinite series and convergence tests, Taylor and Maclaurin polynomials/series, parametric and polar functions, vector-valued functions, and linear differential equations. In addition, students will be introduced to a variety of proofs using William Dunham's Journey Through Genius.
Prerequisites: $\quad$ AP Calculus AB , minimum grade of 4 on the AP exam and department recommendation Full Year 6 Credits

## ADVANCED PLACEMENT CALCULUS AB/BC (448)

After a brief review of limits and derivatives, students will begin a comprehensive study of integral calculus and its applications. Investigating the Fundamental Theorem of Calculus will connect this course's material with the differential calculus previously studied during the second semester of Advanced Precalculus Honors. Subsequent topics covered in this course include differential equations, polar and parametric functions, convergence tests for infinite series, as well as Taylor and Maclaurin polynomials/series. Students will take the Advanced Placement Calculus BC Exam.

$$
\begin{array}{ll}
\text { Prerequisites: } & \text { B+ in Advanced Precalculus Honors and department recommendation } \\
\text { Full Year } & 6 \text { Credits }
\end{array}
$$

## NUMBER THEORY AND COMBINATORICS (461) HONORS

This course introduces several seminal ideas and fields of mathematics atypical of the standard high school curriculum at a level that presupposes an understanding of limits. Topics covered in this course include number theory, combinatorics, and graph theory. The course explores various applications that synthesize these concepts, such as various methods of proof, modular arithmetic, Diophantine equations, Eulerian and Hamiltonian cycles, weighted graphs, and the binomial theorem. These advanced topics introduce students to fields of mathematics that could interest them at the post-secondary level.

$$
\begin{array}{ll}
\text { Prerequisites: } & \begin{array}{l}
\text { A- in Calculus or B- in Calculus Honors, or seniors co-enrolled in Calculus Honors who } \\
\text { earned a B in Precalculus Honors, and department recommendation }
\end{array} \\
\text { Full Year } & 6 \text { Credits }
\end{array}
$$

## POST-AP MULTIVARIABLE CALCULUS (463)

This course provides students with an in-depth introduction to differential, integral, and vector calculus for functions of more than one variable. After a brief review of vectors and vector operations, students will investigate the properties and graphs of multi-dimensional functions. Further topics will include partial derivatives, optimization, multiple integrals, and spherical/cylindrical coordinates. Additionally, students will learn about line and surface integrals, culminating in the study of Green's Theorem, Stokes's Theorem, and the Divergence Theorem. Students may not take this post-AP course against recommendation.
Prerequisites: $\quad \mathrm{AP}$ Calculus $\mathrm{AB} / \mathrm{BC}$ (and at least a 4 on the BC exam), and department recommendation Full Year 6 Credits

## POST-AP LINEAR ALGEBRA (456)

This course provides students with a full-year, in-depth introduction to Linear Algebra. After an introduction to vector spaces, subspaces and basis, students will review matrix algebra as a way to solve systems of linear equations. Further topics will include linear transformations, determinants, eigenvalues/eigenvectors and inner product spaces. Students may not take this post-AP course against recommendation.
Prerequisites: Multivariable Calculus or co-enrolled in Multivariable Calculus and department recommendation
Full Year
6 Credits

Grade 9-12
Grade 10-12
Grade 11-12
Grade 12
Computer Science $---\cdots-\cdots \rightarrow$ Introduction to
Pundamentals
Programming

## COMPUTER SCIENCE FUNDAMENTALS (550)

This course introduces students to computer science and examines how computing is utilized in many fields. Students will study internet history, the world wide web, HTML, device hardware, networking, data abstraction, algorithms and software, cyber security, ethics and the social impact of computing. Providing students with skills and understanding to utilize technology responsibly and to protect their personal data is a common theme reinforced throughout the course. Students will be introduced to programming languages with exercises using Javascript and Python. The class will explore advanced topics through discussion of professional technical news items, such as big data, cloud computing, and artificial intelligence. By the end of the course, students will have enough knowledge to navigate the technological world and pursue their own interests. Website design is not taught in this course. Prior programming experience is not required.
Full Year 6 Credits

## INTRODUCTION TO PROGRAMMING (555)

This course is an introduction to understanding and analyzing problems by writing and debugging computer programs. Using the Python programming language, students create programs of increasing complexity using multiple paradigms. The course begins with a focus on functional programming and culminates in the study of object-oriented programming, which is a paradigm of software design and development used in academia, industry and the AP course. Programming projects range from solving mathematical challenges to drawing 2-D graphics using modeling algorithms. Prior computer programming experience is not required. HTML and JavaScript are not used in this course.

| Prerequisites: | B + in Geometry or B in Geometry Honors |
| :--- | :--- |
| Full Year | 6 Credits |

## JAVA PROGRAMMING (560)

This course introduces students to the Java programming language with a focus on object-oriented programming. Java is a popular industrial language that can be used to write general purpose applications. Students will learn Java code organization, syntax, data typing, control structures, and exception handling. Accepted practices and conventions for professional Java coding are taught and used in the course. Basic object-oriented topics include objects and classes. Programming with data input/output is also covered. Students who perform well in this class can continue on to take Advanced Placement Computer Science.

Prerequisite: Introduction to Programming
Full Year 6 Credits

## ADVANCED PLACEMENT COMPUTER SCIENCE (561)

This course is organized into six main categories: program design, program implementation, program analysis, algorithms, classes, and objects. Students will begin by learning Java language syntax with an emphasis on objectoriented design methods. This class explores the concepts of inheritance, encapsulation, and polymorphism by designing and writing Java programs of increasing complexity. Students will develop solid programming skills and debugging strategies through lab assignments in preparation for the AP Computer Science A Exam.

Prerequisites: $\quad$ B+ in Algebra 2 or B in Algebra 2H; B+ average on in-class assessments in Introduction to Programming, or $\mathrm{B}+$ in Java Programming and department recommendation
Full Year
6 Credits

## POST-AP DATA STRUCTURES AND ALGORITHMS (562)

This course continues two of the major concepts covered in AP Computer Science: program analysis and algorithm design. Students will spend the first semester building Data Structures while analyzing their efficiency in context. Data Structures will include lists, stacks, queues, trees, graphs, sets, heaps, and hash maps. Using those structures, students will examine the most common problems and algorithms in computer science. Students will start with sorting and searching algorithms then explore Graph, Divide-and-Conquer, Greedy, Dynamic programming, Randomized, and Backtracking algorithms. This will culminate in an analysis of the classification of algorithms and a discussion of one of the unsolved problems in Computer Science: P vs. NP. Students may not take this post-AP course against recommendation.

Prerequisites: AP Computer Science (and at least a 4 on the AP Computer Science A exam) and department recommendation<br>Full Year 6 Credits

## SCIENCE

The Science Department offers courses that provide students with a strong background in the three major areas of science: biology, chemistry, and physics. In addition to challenging students in the areas of critical thinking and problem solving, courses engage students in the process of science by introducing new laboratory methodology and helping students to become scientifically literate citizens. Most Upper School students take four years of science; those students who plan to major in science or engineering or those who may pursue medicine are strongly encouraged to do so. Some students take two science courses as juniors and/or seniors. Please note the courses for which the Common Work Period is used on a regular basis to extend instructional time.
Graduation Requirement: Students must complete three years of science: biology, chemistry and physics.
Acceleration Policy: For the 2020-2021 school year, acceleration into AP Physics C: Mechanics or AP Physics C: Mechanics and Electricity \& Magnetism may be possible for students in junior or senior year who already have extensive background, coursework, and experience in the subject. Any student who wishes to accelerate through the first-year physics course must obtain approval from the Upper School Department Chair for their specific summer course in advance and must submit a Course Acceleration Form in May. The Course Acceleration Form includes important information pertaining to this process and specific requirements for acceleration. A student who accelerates into AP Physics C: Mechanics and takes the course during their junior year may not take AP Physics C: Mechanics and Electricity \& Magnetism during their senior year.

## BIOLOGY 1 (605)

## BIOLOGY 1 (606) HONORS

Students are introduced to the science of biology from an ecological perspective that incorporates an understanding of the abiotic and biotic factors that impact living things. Students will explore topics in ecology, genetics, evolution, system studies of life from the molecular, cellular, and organismal level, and taxonomy; content will be supported by activities and experiments. Students will have the opportunity to acquire the necessary analytical writing skills, experimental skills, and processing skills to continue their studies in science. The honors course covers the same concepts but uses a different textbook to explore them with added depth and breadth.
Prerequisites for Bio $\mathbf{1 H}$ : A- or above in 8th grade science and department recommendation Full year 6 Credits

## BIOLOGY 1 SCIENCE RESEARCH (609) HONORS

This course covers the Biology 1 Honors course content, with the expectation of more independence on the part of the student, so that more class time can be devoted to laboratory inquiry activities. In addition, students will be introduced to the fundamentals of scientific research. A significant part of the course focuses on developing testable questions, designing experiments, and communicating results. Students in this course will prepare additional and more detailed laboratory reports than in Biology 1 H , and in this course, students will present their findings to peers. This class will use its Common Work Period.
Prerequisites: A- or above in 8th grade science and department recommendation Full year 6 Credits

## CHEMISTRY 1 (625)

## CHEMISTRY 1 (627) HONORS

This course provides an overview of the major topics and problem-solving techniques in chemistry. Topics explored include atomic theory, chemical nomenclature and reactions, the mole and stoichiometry, chemical bonding, properties of matter, and basic thermodynamics. Students will explore these topics through discussion, activities, mathematical analysis and laboratory experiments. The honors course includes additional topics and requires more in-depth quantitative analysis of the concepts along with a more rigorous laboratory component.
Prerequisites for A- in Biology 1 or B+ in Biology 1H or SRH; B+ in Algebra 2, B in Algebra 2H, or Chem 1H: co-enrollment in Algebra 2H or Advanced Algebra 2 Honors; and department recommendation Full Year 6 Credits

This course covers the Chemistry 1 Honors content, but with greater depth and with the expectation of more independence on the part of the student, so that more class time can be devoted to laboratory inquiry activities. In addition, students are introduced to aspects of scientific research. A significant part of the course focuses on developing testable questions, designing experiments, and communicating results. Students will prepare additional and more detailed laboratory communications, and they will present their findings to peers. This course will use its Common Work Period.
Prerequisites: B+in Biology 1H or SRH; B+ in Algebra 2, B in Algebra 2H, or co-enrollment in Algebra 2H or Advanced Algebra 2 Honors; and department recommendation
Full Year 6 Credits

## PHYSICS 1 (648)

This hands-on introductory physics course includes the basics of mechanics, energy, gravitation, waves, light, and electricity. Laboratory work, demonstrations, discussions, and in-class practice all emphasize knowledge acquisition, conceptual understanding and problem-solving strategies. Students will be expected to develop understanding of facts, link them together to form meaningful connections, and use algebraic equations to guide their thinking.

| Prerequisites: | Biology 1 and Chemistry 1 |
| :--- | :--- |
| Full Year | 6 Credits |

PHYSICS 1 (649) HONORS
This introductory course provides an algebra- and trigonometry-based approach to physics. It covers the basic topics of classical physics: kinematics, dynamics, energy, momentum, gravitation, electricity $\&$ magnetism, and waves. Students will explore these topics through conceptual discussions, mathematical analysis, computer simulations, and laboratory experiments.
Prerequisites: Biology 1; B+ in Chemistry 1 or B in Chem 1H/SRH; B in Algebra 2H or B- in an honors-level precalculus or calculus course; and department recommendation
Full Year 6 Credits

## ADVANCED PLACEMENT PHYSICS 1 (619)

This introductory course provides an algebra-based approach to physics. It is the equivalent of a first-semester introductory college course in algebra-based physics. Students cultivate their understanding of physics through inquiry-based investigations as they explore these topics: kinematics, dynamics, circular motion and gravitation, energy, momentum, simple harmonic motion, torque and rotational motion, electric charge and electric force, DC circuits, and mechanical waves and sound. This class will use its Common Work Period.
Prerequisites: Biology 1; A- in Chemistry 1 or $\mathrm{B}+$ in Chem 1H/SRH; B+ in Algebra 2H or B in an honorslevel precalculus course; and department recommendation
Full Year 6 Credits

## PHYSICS 2 (647) HONORS

This course builds on Physics 1 Honors with topics including gravitation, waves and sound, rotational motion, relativity, and electricity. A lab-based project is completed in April. There is a strong problem-solving component to this course and significant lab work will be required.
Prerequisites: A- in Physics 1 or B in Physics 1H; B in Algebra 2H or B- in an honors-level precalculus or calculus course; and department recommendation
Full Year 6 Credits

# ADVANCED PLACEMENT PHYSICS C: MECHANICS (650)* <br> This course uses a rigorous calculus-based approach and is designed to be the equivalent of a first-semester college physics course for physics and engineering majors. The course covers the topics found in the AP Physics C: Mechanics exam: kinematics (displacement, velocity, and acceleration in straight-line and projectile motion); dynamics (Newton's Laws of motion, frictional and centripetal forces, etc.); work, energy and power; systems of particles (center of mass, impulse, momentum and collisions); circular motion and rotation (uniform circular motion, rotational kinematics and dynamics, angular momentum, torque, rotational kinetic energy, static equilibrium); oscillations (simple harmonic motion and pendulums); gravitation; and laboratory work. Einstein's special theory of relativity will also be examined. This class will use its Common Work Period. <br> *This course is being offered in the 2020-2021 school year. <br> Prerequisites: B+ in Physics 1H; B+ in Calculus H, B in AP Calculus AB or co-enrolled in an AP Calculus course, and department recommendation <br> Full Year 6 Credits 

## ADVANCED PLACEMENT PHYSICS C: MECHANICS AND ELECTRICITY \& MAGNETISM (651)

This course uses a rigorous calculus-based approach and is designed to be the equivalent of a year-long college physics course for physics and engineering majors. The course covers the topics found in both the AP Physics C: Mechanics exam and the AP Physics C: Electricity and Magnetism exam. Topics include: kinematics; dynamics; work, energy and power; systems of particles; circular motion and rotation; oscillations; gravitation; electrostatics; conductors, capacitors, and dielectrics; electric circuits; and magnetic fields. This class will use its Common Work Period.

Prerequisites: $\quad \mathrm{B}+$ in Physics 1 H ; $\mathrm{A}-$ in AP Calculus AB or B in AP Calculus $\mathrm{AB} / \mathrm{BC}$ or co-enrollment in AP Calculus $\mathrm{AB} / \mathrm{BC}$ only with departmental approval; and department recommendation
Full Year 6 Credits

## BIOLOGY 2 (634) HONORS

This course is intended as a follow-up to the first-year biology course, with most of the work concentrating on biochemistry and molecular biology as taught in a first-year, college level biology course. The first semester focuses on the chemical aspects of macromolecules and their biological interactions. The second semester applies the concepts of the first semester to the study of enzymes and ATP, DNA replication and mutation errors that may occur, DNA transcription and translation in protein synthesis. Juniors taking the course will use the last month of the school year to study photosynthesis and cellular respiration at the molecular level.
Prerequisites: B in Biology 1 or B- in Biology 1H/SRH; B+ in Chemistry 1 or B in Chemistry/SRH or B+ in Physics 1 or B in Physics 1H; department recommendation
Full Year 6 Credits

## ADVANCED PLACEMENT BIOLOGY (635)

This course is a second-year biology course that explores the four "Big Ideas" of the discipline: (1) Evolution drives diversity and unity of life; (2) Biological systems utilize free energy and molecular building blocks to grow, reproduce, and maintain dynamic homeostasis; (3) Living systems store, retrieve, transmit, and respond to information essential to life processes; and (4) Biological systems interact, and these systems and their interactions possess complex properties. Significant emphasis is placed on scientific inquiry and student-directed laboratory experiences. This class will use its Common Work Period.
Prerequisites: A- in Biology 1 or B+ in Biology 1H or SRH; A- in Chemistry 1 or B+ in Chemistry 1H or SRH, and department recommendation
Full Year 6 Credits

This second-year chemistry course gives students a detailed look at specific topics in chemistry. It serves as an introduction to first-year, college-level chemistry. Inorganic chemistry topics include thermodynamics, atomic structure, bonding theories, reaction types, and equilibrium. Behavior of gases and reactions in aqueous solution are also investigated. Furthermore, students are introduced to organic chemistry and engage in scientific writing. Laboratory work is an integral part of the course.
Prerequisites: B- in Biology 1, 1H or SRH; B+ in Chemistry 1 or B in Chemistry 1H or SRH; B in Algebra 2 H or B - in an honors level precalculus course and department recommendation; for seniors who have taken physics, B in Physics 1 or B- in Physics 1H; and department recommendation
Full Year 6 Credits

## ADVANCED PLACEMENT CHEMISTRY (621)

This course is designed to be the equivalent of a first-year college general chemistry course. This secondyear chemistry course covers in detail the topics in organic and inorganic chemistry found on the Advanced Placement Chemistry exam. These topics include: structure of matter (atomic theory and atomic structure, chemical bonding, and nuclear chemistry), states of matter (gases, liquids, solids, and solutions), reactions (reaction types, stoichiometry, equilibrium, kinetics, and thermodynamics), descriptive chemistry, and laboratory work. This class will use its Common Work Period.
Prerequisites: B+ in Biology 1 or B in Biology 1H or SRH; A in Chemistry 1 or B+ in Chemistry 1 H or SRH ; $\mathrm{B}+$ in Algebra 2 H or B in an honors precalculus course; and department recommendation; for seniors who have taken physics, B+ in Physics 1 or B in Physics 1H; and department recommendation
Full Year 6 Credits
BIOMECHANICS AND PHYSIOLOGY (544)
This course, an interdisciplinary offering, is open to juniors and seniors. PLEASE REFER TO THE INTERDISCIPLINARY SECTION OF THE CURRICULUM GUIDE TO READ THE FULL COURSE DESCRIPTION.
Full Year 6 Credits

## ENVIRONMENTAL SCIENCE 1 (641)

This course introduces students to the study of the environment and how humans impact the various characteristics of it. We begin by studying Earth systems, water quality, ecology, biodiversity, and climate change and take field trips to enhance our depth of understanding of these topics. We will explore the woods behind the school to study ecology, then take a field trip to a nearby river to engage in water quality testing. There are several poster projects that are a fun way to engage in the subject matter while being creative. Students who want to take this subject all year must request both courses.
Prerequisites: Biology 1 and Chemistry 1
Fall 3 Credits

## ENVIRONMENTAL SCIENCE 2 (642)

This course is a continuation of, and relies upon a thorough understanding of, Environmental Science 1. Topics discussed include human population, energy sources, municipal solid waste, hydrology, soil, and the impact of humans on the environment. Case studies, including student-chosen examples, will be used to explore the themes of conservation and sustainability. Students will work on a project to improve the sustainability of the school. Students who want to take this subject all year must request both courses.

$$
\begin{array}{ll}
\text { Prerequisite: } & \text { Environmental Science 1 } \\
\text { Spring } & 3 \text { Credits }
\end{array}
$$

## ADVANCED PLACEMENT ENVIRONMENTAL SCIENCE (643)

In this course, students explore and investigate the interrelationships of the natural world and analyze environmental problems, both natural and human-made. Students take part in laboratory investigations and field work, which are integral to the course. The curriculum is designed for highly motivated STEM students interested in the study of environmental science at the greater depth and faster pace characteristic of an AP course. Students develop an understanding of environmental concepts and processes, practice the application of quantitative methods in problem solving, gain experience analyzing data, visual representations, and published research, and they propose a viable approach to solve a "real world" environmental problem with research to support their idea. AP Environmental Science topics include (1) energy transfer in biogeochemical systems, (2) interactions between biogeochemical systems, (3) human interactions and alterations of biogeochemical systems, and (4) sustainability. Students participate in a number of field trips to local facilities and ecosystems. This course will use its Common Work Period.

Prerequisite: A- in Biology 1 or B+ in Biology 1H or SRH; A- in Chemistry 1 or B+ in Chemistry 1H or SRH and department recommendation.
Spring 6 Credits

ASTRONOMY 1 (637)
This course focuses primarily on becoming familiar with the night sky in terms of the celestial sphere and equatorial coordinates vs. altazimuth coordinates used in locating positions of stars. Students will study phenomena within our solar system, such as the reasons for seasons on earth, precession, phases of the moon, solar and lunar eclipses, and the inferior and superior planets. Students will complete web-based MasteringAstronomy tutorials and SkyGazer activities to reinforce the concepts they will learn in this course. Students who want to take this subject all year must request both courses.
Prerequisite: Successful completion of, or co-enrollment in, a physics course
Fall 3 Credits

## ASTRONOMY 2 (638)

In this semester of Astronomy, the focus shifts to the stars and constellations in the night sky. Students will study the constellations of the different seasons and how to identify their main stars. Students will also focus on the spectral categories of stars, their proper motion, and their birth, evolution, and death. Other topics include the Doppler Effect and red shift, in terms of their application to stellar and galactic motion. Students will complete web-based MasteringAstronomy tutorials and SkyGazer activities to reinforce the concepts they will learn in this course. Students who want to take this subject all year must request both courses.

| Prerequisite: | Astronomy 1 <br> Spring |
| :--- | :--- |
|  | 3 Credits |

SCIENCE RESEARCH (656) HONORS
This course is devoted to independent work on mentor-assisted research projects that each student chooses, designs, and executes. Students will choose a mentor, who may be an MKA faculty member or a scientist from a college or industry. A student's grade will be based on designing and undertaking a research project, submitting the proposal on time, keeping an accurate and up-to-date record of research data and analysis in a laboratory notebook, making regular progress reports, and writing a final paper describing the experimental design, results, and conclusions. Students will be required to schedule and attend regular meetings, and may be asked to participate in electronic discussions. S1 focuses on designing the project, writing a research proposal, and discussing the proposal with the research committee. Students will collect data and write their formal paper during S2. Enrollment preference is given to students who took Biology 1SRH and/or Chemistry 1SRH. Students may take this course more than once.
Prerequisites: Department recommendation; interested students must schedule an interview in May Full Year 2 days/cycle 3 Credits

## Fine and Performing Arts

Education provides the filters through which we view a multifaceted and complex world. The arts are an essential filter, allowing us to celebrate our individuality within a community; to experience an emotional, physical and intellectual involvement in the world; to question and learn from ourselves and our limits; and to understand the more subtle aspects of human endeavor. The disciplines within the fine and performing arts teach students to develop, express, and evaluate ideas; think critically and imaginatively towards problem solving; produce and interpret images and creative work; understand the artistic achievements of others; and develop self-discipline and focus.

The department encourages students to take a variety of courses and to explore disciplines in the arts outside their previous experience. By varying their arts experiences, students can enhance the quality of their lives at MKA and beyond.

Graduation Requirement: Students must complete nine credits in the department. Several of the disciplines have sequential courses, and prerequisites should be carefully noted. When class size is limited, registration priority is given first to seniors, then juniors, sophomores, and freshmen.

## VISUAL ARTS

## DRAWING AND PAINTING 1 (702)

This course increases students' visual awareness and develops their drawing and painting skills. Emphasis is on the description of form through the use of line, space, shape, and color. Imagination and creativity are encouraged and developed through a variety of studies, drafts, and exercises.
Full Year 3 days/cycle 3 Credits

DRAWING AND PAINTING 2 (748)
The development of drawing and painting skills are the primary focus of this course. In addition, students will explore the relationship between content and composition. Concept and imagination take on a larger role as students begin to develop their own visual language through studies and exploratory drawing. The course concludes with projects that combine traditional drawing media with digital applications.

Prerequisite: Drawing and Painting 1 or department recommendation based on a portfolio review Full Year 3 days/cycle 3 Credits

## STUDIO ART (756) HONORS

This course provides a rigorous, in-depth exploration of concepts and skills that challenge students to move beyond fundamentals toward a deeper understanding of visual expression. Drawing and related skills are important elements in the course work; however, some assignments may be executed either twodimensionally or three-dimensionally. The emphasis of the course will be on the development of a student's portfolio; work produced will be appropriate for use in the college admissions process. Regular homework projects are assigned.

Prerequisites: Draw/Paint 2 or Sculpture 2 and department recommendation based on a portfolio review Full Year 4 days/cycle 6 Credits
ADVANCED PLACEMENT STUDIO ART (757)
This course provides students an opportunity to prepare work for one of the three different AP Studio Art exams:
Drawing, Two-Dimensional Design, or Three-Dimensional Design. Students must demonstrate both mastery of
skills and breadth of understanding of artistic concepts. Expectations are high for the quality of work produced and
the amount of work to be completed. A significant amount of work must be done outside of class.
Prerequisite: Department recommendation; students must submit an application portfolio in order to
be considered
Full Year 4 days/cycle 6 Credits

## SCULPTURE 1 (707)

This course provides a hands-on introduction to three-dimensional object making. Students will gain an understanding of basic procedures and learn about the forms of sculpture. Students' goals are to experiment with ideas and to examine the potentials and limitations of a variety of materials, including clay, papier-mâché, plaster, cardboard, wood, stone, and metal. Students will study aspects of the history of sculpture and analyze contemporary artists' work.
Full Year
3 days/cycle
3 Credits

SCULPTURE 2 (708)
This course provides a continuation of Sculpture 1 for experienced students and guides them through more advanced procedures and the competent handling of materials. Emphasis is placed on the development of ideas and how those ideas can be successfully realized. Large-scale projects include using clay; plaster casting; and carving wood, stone, and metal.
Prerequisite: Sculpture 1 or department recommendation based on a portfolio review
Full Year 3 days/cycle 3 Credits
SCULPTURE PROJECTS: 3D DESIGN (709)
This course provides experienced students the opportunity to explore 3D modeling concepts in depth. Students will investigate design problems in architecture, object, and furniture design using digital software and tools, including 3D printing and laser cutting. Emphasis is on thinking, problem solving, creativity, and inventiveness. Students will work in a wide range of materials learning construction and fabrication techniques to build models and prototypes.
Prerequisite: $\quad$ Sculpture 2 or department recommendation based on a portfolio review
Full Year
3 days/cycle 3 Credits

## PHOTOGRAPHY 1 (774)

This course introduces students to the basics of digital camera operation, exposure, and printing. Additionally, students will begin to explore a traditional darkroom and develop an awareness of what makes a photograph work visually and conceptually. Each student must have access to a digital (DSLR) camera capable of manual operation.
Fall or Spring 4 days/cycle 3 Credits

## PHOTOGRAPHY 2 (776)

Designed for more experienced photographers, this course helps students refine and expand their technique, and challenges them to develop more intriguing and effective photographs. Students will practice aspects of advanced camera operation, and digital editing techniques. Additionally, students will gain more experience working in the darkroom with medium format film cameras and enlarging negatives, while maintaining an overall focus on the artistic and expressive content of their work. Each student must have access to a digital (DSLR) camera.
Prerequisite: Photography 1 or department recommendation based on a portfolio review
Fall or Spring 4 days/cycle 3 Credits

Designed for students who are seriously interested in exploring photography and photographically-based work, this course will provide a structured opportunity for young photographers to build a body of work based on issues and concepts of significance to them. Students will be given open ended projects and encouraged to work with a variety of traditional and digital photographic techniques. The goal of the course is not only for students to end with a strong portfolio, but also to begin to define themselves as young artists.

Prerequisites: Photo 1, Photo 2, or department recommendation based on a portfolio review
Fall or Spring 3 days/cycle 3 Credits

## THEATRE

## EXPERIENCE OF THEATRE (729)

This is the basic foundation of all the performing arts courses. In this course, we explore all areas of the theatrical mediums. We begin with theatre history, discovering all the places in the world where theatre had its birth. From there we move on to famous and ground-breaking playwrights to the business side of theatre (publicity, advertising, etc.) to musical theatre, Shakespeare, technical theatre, and script analysis. This culminates with each student writing their own play and watching it come to life. Basic theatre vocabulary is also covered. Each student is required to attend all Upper School productions, including - but not limited to - the Fall Play, the Winter Musical, and the Spring Play.
Full Year 3 days/cycle 3 Credits

## ACTING (714)

This course delves into the basics of performing a scene and developing a character, including the use of exercises, warm-up games, and select improvisation. During the first semester, students will work on performing open-ended scenes in groups of two in which they set the plot and details. In the second semester, they will move on to scene work from established plays in groups of more than two actors. Students will also work on monologues throughout both semesters. Each student is required to attend all Upper School productions, including - but not limited to - the Fall Play, the Winter Musical, and the Spring Play.

## Prerequisite: Experience of Theatre

Full Year 3 days/cycle 4 Credits

## AUDITION TECHNIQUE (710)

Auditioning well is a technique all its own and is a necessary skill. This course is designed to teach students how to audition, from logistics to etiquette to performance. A major focus will be to create confidence in the student's audition process. Each student will also spend time creating a proper, and individualized, audition portfolio that could be used for the college audition process, and/or for general auditions outside MKA. Mock auditions, special readings with discussions, special guests, and cold readings will all be a part of the curriculum. Guidance will be available for creating a resume, filming a video reel, and having a headshot taken. Students may take this course more than once.

## Prerequisites: Acting

Fall 3 days/cycle 2 Credits

This course will focus on the performance genre of musical theatre, arguably the most difficult genre as it encompasses vocal skill, dance ability, and acting prowess. Students will focus on the art of being considered a triple threat, will study the greats, and will experience special guest workshops. Special focus will be placed on how to integrate the three skills into a great musical theatre performance, so students will learn specific exercises to advance their current skill levels. Students will also work on solos, duets and trios.
Prerequisites: Acting or Chamber Singers or Choreography Workshop
Spring 3 days/cycle 2 Credits

## IMPROVISATION (715)

This course explores the art of improvisation, a building block of the acting craft and an important skill for all types of performers. It incorporates exercises done by beginning students and seasoned professionals. It also helps actors understand the feel of being in a performance troupe and adds to the performance confidence students should have built in previous courses. We will use exercises, warm ups, and games that will unfold into sketches and scenes. The culmination of this course will be a workshop performance. Students may take this course more than once.
Prerequisites: Experience of Theatre and completion of or co-enrollment in Acting
Pass/Fail
Full Year 1 day/cycle 1 Credit

## DIRECTED STUDY PROGRAM

During the 2020-2021 school year, we plan to offer one or more Directed Study courses in Playwriting and/ or Filmmaking. While successful completion of courses in this program is noted in the student's transcript, Directed Study courses do not count towards credit and do not fulfill graduation requirements. Students will learn about these courses once the school year starts and may not sign up in advance. These courses are offered in the evening.

## DANCE

## DANCE WORKSHOP (758)

This course is designed to develop the skills of the beginner dancer in the traditional styles of ballet, jazz, and contemporary dance, as well as explore the genres of musical theatre and hip hop. Students will be taught introductory dancer's vocabulary, as well as will work on a traditional skill set and will acclimate themselves to the structure of a professional dance class. Students will study the works of famous choreographers, such as Bob Fosse, Alvin Ailey, and Twyla Tharp, as well as learn how to create a concept for an original piece. Specialty workshops are also brought in several times throughout the year. The course culminates in a full-class performance as part of the spring Dance Concert. Students may take this course more than once.
Pass/Fail
Full Year 3 days/cycle 3 Credits
INTERMEDIATE DANCE WORKSHOP (759)
This course is designed to enhance the skills of the intermediate dancer in all styles (ballet, jazz, contemporary, musical theatre, hip hop), as well as explore the idea of improvisation. Students will engage in partnered-projects as they study dance through the decades in history and the works of major choreographers, appreciate how each style dictates movement and its feeling, as well as explore their budding inner choreographer. Specialty workshops are also brought in several times throughout the year. The course culminates in a full-class performance as part of the spring Dance Concert. Students may take this course more than once.
Prerequisites: Completion of Dance Workshop, or department recommendation
Pass/Fail
Full Year
3 days/cycle 3 Credits

For serious students who want to learn more about choreography, this course assumes knowledge of technical skills and focuses solely on creation. Students will study different methods of choreography and will explore uses of shape, level, space, tempo, direction, and intention. Students will work on solos, duets, group, and company pieces, culminating in the Dance Concert. Performance of successful works, including participation in the concert, is a course requirement. Seniors must attend class and rehearsals during May Term, until the Dance Concert. Students may take this course more than once.
Prerequisites: Department recommendation based on work in Dance Workshop and/or an audition Full Year 3 days/cycle 4 Credits

## MUSIC

CONCERT CHOIR (760) 9-12
In this course, students will rehearse and perform a wide variety of choral music. Lessons emphasize ear-training skills, reading vocal music, choral-building techniques, and singing in four-part harmony. Previous singing experience is not necessary. Participation in the winter and spring concerts and all dress rehearsals is a course requirement. Students may take this course more than once.
Pass/Fail
Full Year 4 days/cycle 3 Credits
CHAMBER SINGERS (762) 9-12
In this course, students will study a more advanced repertoire of various styles, delving into more complex vocal music. Blend, tone, phrasing, intonation, and a cappella singing are focal points. Chamber Singers may perform community concerts throughout the year, such as Homecoming and Music in the Parks Festival. Participation in the winter and spring concerts, all dress rehearsals, and Commencement is a course requirement. Students may take this course more than once.
Prerequisites: New members require department recommendation based on an audition. Current Concert Choir and Chamber Singers students enroll based on department recommendation by audition and class performance.
Pass/Fail
Full Year 4 days/cycle 3 Credits

## JAZZ CHOIR (763)

This course is for experienced chorus students and guides them through complex harmonies, rhythms, and improvisational singing techniques. Students learn to construct jazz scales and chords and develop an understanding of the style through instruction, improvisation exercises, as well as ensemble and solo performances. Emphasis is placed on singing and music literacy. Students will also explore jazz history and study the works of jazz artists and composers. Students may take this course more than once.

| Prerequisites: | Two years of Chamber Singers, or by audition if previous choral singing experience. <br> May co-enroll in Chamber Singers. |
| :--- | :--- |
| Pass/Fail | 4 days/cycle 3 Credits |
| Full Year |  |

In this course, students will play music from the baroque, classical, romantic, and contemporary eras. Students are coached in the basics of rhythm, tone production, dynamic, and phrasing. Openings for certain instruments are limited, and auditions may be required to determine placement. Band members have the opportunity to join smaller ensembles, such as Jazz Band, brass quintet, or woodwind quintet. Enrollment in Concert Band is required for all students participating in these smaller ensembles, with the exception of students who play bass, guitar, and piano. Band does not include strings, piano, or guitar. Participation in all performances is a course requirement, as is attendance at sectional rehearsals, which take place once/cycle during the afternoon (2:25-2:55) activity period.

## Students may take this course more than once.

Pass/Fail
Full Year 4 days/cycle 3 Credits

## BEGINNING STRING INSTRUMENTS (740)

This course introduces the basics of playing a stringed instrument: development of technical knowledge, tone production, and performance skills. Students will also learn the fundamentals of music notation: reading of clefs, key signatures, rhythm, basic harmonic structures (intervals and chords), sight-reading, and basic music history. Students in Beginning Strings usually continue in String Orchestra the following year. Course is contingent on a minimum enrollment of 3 students.
Pass/Fail
Full Year 4 days/cycle 3 Credits

## STRING ORCHESTRA (745)

As a performance ensemble for stringed instruments (violin, viola, cello and bass), this course includes various aspects of string playing, such as bowing styles (e.g., legato, marcato, detache, martele, staccato, spiccato, col legno, ponticello and sul tasto), and left-hand techniques (e.g., shifting, vibrato, harmonics and double stops). Students will develop intonation; rhythmic accuracy; and ear-training, sight-singing, and ensemble skills. Literature includes music of diverse styles from the Renaissance period to the present. Participation in all performances is a course requirement. Students may take this course more than once.

## Prerequisite: Department recommendation

Pass/Fail
Full Year 4 days/cycle 3 Credits


#### Abstract

ADVANCED STRINGS (741) This course is designed for the school's most advanced string players. Students must have completed Suzuki Book Level 4 and should be working on specific technical repertoire, including Etudes by Wohlfahrt op. 45 Book 2, or Kayser. Students who do not use the Suzuki books must have completed concerti, such as the Bach Double Concerto. All students who audition for Advanced Strings must be completely fluent in the high positions of their instruments. Students working on Suzuki Level 7 or above will be considered for the First Violin section or Section Principal players. Prospective first violin players must have completed Concerti such as Haydn C or G Major, Bach A minor or E Major, Monti Czardas, or other solo show pieces of equivalent or more advanced difficulty. They should also be working on Etudes or Caprices by Dankla, Dont, Rode, Wieniawski, or Paganini. This course explores chamber and orchestral works of the standard repertoire in their original versions. In addition, students will also study the repertoire of, and perform together with, the String Orchestra. Participation in all school performances is a course requirement. Students may take this course more than once.


Prerequisite: Department recommendation, which may include a live or taped audition

## Pass/Fail

Full Year 4 days/cycle 3 Credits

This course is for the student who wishes to pursue more knowledge of the inner workings of music. It is an introduction to the principles and practices upon which music is built. Students will develop more proficient music reading skills. Students will also be introduced to the following topics: rhythm, pitch, intervals, major and minor scales, chord construction, and the basic nomenclature of functional harmony. These topics of study will be placed in their historical context to give each student a foundational knowledge of the development of compositional techniques. Students will also begin to develop their aural skills through sight-singing and melodic dictation.

$$
\begin{array}{ll}
\text { Prerequisite: } & \text { Department recommendation based on a written and oral examination } \\
\text { Full Year } & 3 \text { days/cycle } \quad 3 \text { Credits }
\end{array}
$$

## MUSIC THEORY 2 (704)

This course builds on the topics presented in Music Theory 1 and extends students' fluency in several areas, including: intervals, chords, scale, modes and chord construction, figured bass and functional harmony, and basic counterpoint in four-part writing. Students will explore the historical context of each topic of study in greater depth and gain more advanced knowledge of the development of compositional techniques from the year 800 to the present. Students will also learn more complex compositional structures and analytical techniques that will help them develop their performing, listening, and creative skills. Ear training through melodic dictation, interval training, and rhythmic training play an important part in developing skills for critical listening, as well as performance practice.
Prerequisite: Music Theory 1 or department recommendation based on a written and oral examination Full Year 3 days/cycle 3 Credits

## ADVANCED PLACEMENT MUSIC THEORY (705)

Students in this course must be able to read and write musical notation, and it is strongly recommended that they have acquired at least basic performance skills in voice or an instrument. Musicianship skills, including dictation and other listening skills, sight singing, and harmony are important parts of this course. Students will develop the ability to recognize, understand, and describe basic processes of tonal music that are heard or presented in a score. Development of aural skills is a primary objective. Sight singing performance practice is also part of the curriculum. Notational skills, listening skills, speed and fluency will also be emphasized.

| Prerequisite: | Department recommendation based on an interview |
| :--- | :--- |
| Full Year | 4 days/cycle $\quad 6$ Credits |

## INTERDISCIPLINARY

Graduation Requirement: Global Citizenship and Ethics and Leadership are graduation requirements. The philosophy behind these two courses is that our students must not only care about their studies, but must also care deeply about how they conduct themselves, both in and out of the classroom. To that end, a focus on information literacy, ethics, leadership and the formation of character, and global citizenship is embedded throughout the MKA curriculum.

## GLOBAL CITIZENSHIP (807)

This course, required for all ninth graders, helps prepare students to be ethical, engaged, and informed members of the global community. Using the design thinking process, students will identify and investigate an important global issue and ultimately create and communicate a plan of action to address that issue. Through activities, conversations, and research, students will grapple with global issues from an ethical perspective while cultivating the prerequisite skills of the discerning researcher, from consideration of media bias and effective project management to engaging ways to pitch a message.
Pass/Fail
Fall 3 days/cycle 2 Credits

## ETHICS AND LEADERSHIP (805)

In this course, required for all tenth graders, students will continue to explore the themes introduced in the ethics strand of Global Citizenship, with a larger scope. They will reflect on the need to make good choices and serve the larger community. During the first half of this course, emphasis is on developing a personal set of ethical principles by which to live. The second component prepares students for leadership at MKA and in the community. In addition to activities and reflections, students will complete a culminating project in which they will consider the skills of effective leadership.
Pass/Fail
Spring 1 day/cycle .5 Credit

## The following courses are not required, but all students in grades 11-12 should review these interdisciplinary offerings.

## BIOMECHANICS AND PHYSIOLOGY (544)

This interdisciplinary course allows students to explore the science of exercise as well as gain experience in conducting original exercise science research. During the first semester, students will explore topics such as anatomy, muscular function and structure, energy metabolism, physiological responses to single bouts of exercise vs. habitual training, the impact of exercise type and intensity, sexual dimorphisms in exercise metabolism, and nutritional biochemistry. Students will develop an appreciation for how these topics apply to the study of athletics and disease. Scientific papers related to these topics will be discussed to reinforce the material, give students experience in analyzing scientific literature, and allow students to finalize their research question for their second semester independent research projects. The majority of the second semester will be devoted to the research project, which will involve summarizing relevant scientific literature, as well as designing and executing experiments to address a guiding research question. Students will write a research paper and present their findings.

| Prerequisites: | B+ in Health, Wellness and Principles of Conditioning or B+ in Biology 2 Honors or <br> successful completion of AP Biology; and successful completion of, or co-enrollment in, a <br> physics course; and department recommendation |
| :--- | :--- |
| Full Year | 4 days/cycle 6 Credits |

New York is a city of contrasts: so symbolic of our nation, and so unlike any other place. It is full of enormous wealth and extreme poverty; endless opportunity and dashed hopes; beauty and vibrancy set against corruption and injustice. What is it that defines New York? What so captures the imagination of those who live there and of the rest of the world? This course will challenge students to answer these questions by providing a fundamental grounding in the history and literature of New York during the 20th century, focusing on key moments in the city's development as a commercial and cultural center. Students will attempt to reconstruct the history and culture of past eras through a variety of sources, including novels, essays, poems, biographies, letters, newspapers, photographs, films and art. This course, team taught by a member of the English Department and a member of the History Department, will have required field trips during school. Students will also be expected to visit the city on their own, outside of school hours, in preparation for in-class presentations. Each student decides whether this course counts as 6 credits for English, 6 credits for History, or 3 credits for each.
Full Year 4 days/cycle 6 Credits

## Health, Wellness \& Physical Education

The Health, Wellness, and Physical Education course offerings encourage students to explore a healthy set of values and habits that will help them navigate the many difficult decisions that modern society presents. Students will strengthen their decision-making skills for the present and future by examining the personal and social issues that each course outlines. Students will gain knowledge of the relationship between physical fitness and a healthy body. The curriculum provides activities with a fitness emphasis and a means for the development of individual goals; classes challenge students to develop physical skills and interests that support a healthy lifestyle.

Graduation Requirement: Students must complete 4.5 credits.

## HEALTH, WELLNESS \& PHYSICAL EDUCATION 1 (971)

The focus of this required course is to explore the link between physical health, wellness, and activity. Students will begin to look at different body systems and their functions, focusing on the cardiovascular, muscular and skeletal systems. They will explore nutrition and how what they eat affects the body, the mind, and energy levels. In the gym and weight room, students will learn the different strands of physical fitness, how to measure their fitness, and how to identify their needs. After an introduction to training equipment, the students will look at designing and following age-, experience- and need-appropriate workouts.
Spring 4 days/cycle 1.5 Credits
Sophomores must select one of four electives that each include the health portion of the tenth grade program. Please note that one of the four electives requires a department recommendation and one requires a swim test. Enrollment in all four electives can also be determined by scheduling constraints. Each elective (see below) contains a health and wellness element that allows students to explore the impact of their decision making on their mental health and how this affects their physical well being. Students will explore and discuss sexuality and sexual abuse, peer pressure and the use of drugs and alcohol, body image and stereotypes, and stress management.

## HEALTH, WELLNESS \& PERSONAL FITNESS (972)

This course allows students to develop a personal fitness regimen that supports their individual goals. Initial physical testing for each component of fitness will provide a base level fitness profile that helps students identify their strengths and weaknesses. Core strength development, aerobic conditioning, and aspects of body composition will be focus areas within a student's exercise plan. Students will record results, set goals, track progress, and submit periodic journal entries about their programs. Students will be able to continue any established programs from last year's class.
Fall
4 days/cycle
1.5 Credits

## HEALTH, WELLNESS \& DANCE FITNESS (973)

The physical portion of this elective is the same as that of Dance Workshop. Please see page 50 for a description of that course.

Fall 4 days/cycle 1.5 Credits

## HEALTH, WELLNESS \& LIFEGUARDING (960)

Students must pass an initial swimming skills test to be enrolled in the class. Advanced water rescue skills, accident prevention, and emergency response are among the major topics. Portions of the class will be conducted in the classroom to learn the first aid and life support procedures. Students will receive American Red Cross certification in "Lifeguarding" and "CPR for the Professional Rescuer" after successful completion of all course work and the written and skills testing.
Fall 4 days/cycle 1.5 Credits

This course allows students to explore sports science through practice and theory. Students will learn basic anatomy, physiology and biomechanics, and will explore the psychology of working out. Students will also learn different methods of research, within the field of sports and physical activity, and how to develop their own research. This course then allows students to test the theory in practice by following different workouts and nutritional plans and analyzing the impact upon the body. The course culminates with students producing their own research paper.
Prerequisite: Department recommendation
Fall 4 days/cycle 1.5 Credits

## BIOMECHANICS AND PHYSIOLOGY (544)

This course, an interdisciplinary offering, is open to juniors and seniors. PLEASE REFER TO THE INTERDISCIPLINARY SECTION OF THE CURRICULUM GUIDE TO READ THE FULL COURSE DESCRIPTION.
Full Year 6 Credits

## HEALTH TOPICS 1 (923)

Students in this course will explore health and safety, gaining a two-year certification in First Aid and CPR through the American Red Cross. In addition, students will increase their understanding of chronic stress and anxiety and will learn practical ways to cope. In particular, students will look at the mental strains associated with being a junior or senior in high school and will focus on social and emotional learning and a mindfulness approach to improving mental well being.
Pass/Fail
Spring 1 day/cycle . 5 Credit

## HEALTH TOPICS 2 (922)

The focus of this required course is to prepare students for what they may face as students living independently for the first time on a college campus. Students will learn how to manage and respond to medical emergencies and conditions of alcohol-related trauma. Practice in CPR and AED skills will allow students the opportunity to become American Red Cross certified. Other topics with college-life emphasis include stress management, risks in sexual behavior, coping with depression, date rape prevention, and dormitory life. Guest speakers will supplement the curriculum to talk about driving safety, substance abuse, and forming healthy relationships.
Pass/Fail
Fall 2 days/cycle 1 Credit

## OFF-CAMPUS SEMESTER PROGRAMS

MKA offers upper school students in their junior year a remarkable array of opportunities to pursue studies off-campus in selected semester school programs. Students who are interested in participating in these off-campus opportunities should contact the Academic Dean in advance to ensure that the receiving school has MKA's approval. Once the Academic Dean notifies students of MKA's approval, students may apply. Families must inform MKA's CFO in writing of the student's intention to apply by February 1st of their sophomore year.
MKA permits students to attend the programs listed below; however, students may ask the school to consider other programs as well. Upon further review, decisions will be made on an individual basis in consultation with the Head of Upper School and Academic Dean. Special consideration will be given to semester programs aligned with our school's mission, values, academic standards, and curricular offerings, but we reserve the right to deny requests to participate in programs not listed below.

It is school policy to allow no more than the equivalent of a maximum of three half-year tuition grants per academic year for semester programs. Students, who are offered admission to Chewonki, SEGL, or Oxbow, may be eligible for a grant, depending on how many applicants there are in a given school year. Students who are offered admission to other preapproved semester programs may attend, but may not be eligible for a grant. MKA will determine which students receive the grants and how much each grant is worth. MKA's CFO will notify families as to the value of an applicant's grant once all admissions decisions are received.

## MAINE COAST SEMESTER AT CHEWONKI - MAINE

Located in Wiscasset, Maine and established in 1988, Maine Coast Semester at Chewonki offers a challenging academic program with an emphasis on environmental studies. Students learn the natural history of the Maine coast, work on an organized farm, go on two short wilderness trips, help maintain the campus, and participate in a rigorous academic program. Up to 40 students are offered admission each semester. For more information, please visit the Maine Coast Semester at Chewonki website: https://mainecoastsemester.org/

## SCHOOL FOR ETHICS AND GLOBAL LEADERSHIP - WASHINGTON, DC

Located in Washington DC and established in 2006, the School for Ethics and Global Leadership (SEGL) offers a rigorous academic program focused on ethical thinking skills, leadership development, and international studies. In addition to completing a standard junior year curriculum, students take an ethics and leadership course. The program features visits to and by prominent speakers in such fields as foreign policy, public service, diplomacy, law, and humanitarian aid. Up to 24 students are offered admission each semester. For more information, please visit the School for Ethics and Global Leadership website: http://schoolforethics.org

## SCHOOL FOR ETHICS AND GLOBAL LEADERSHIP - SOUTH AFRICA

Located in Johannesburg, South Africa, the School for Ethics and Global Leadership (SEGL) in partnership with the African Leadership Academy (ALA) established a semester program in 2019. SEGL at ALA students pursue a rigorous college preparatory course schedule, focused on ethical thinking skills, leadership development, and international studies. In addition to completing a standard junior year curriculum, students take an ethics and leadership course. The program features African-based case studies and several off-campus excursions to popular South African sites during the semester. Up to 24 students are offered admission each semester. For more information, please visit the School for Ethics and Global Leadership website: http://schoolforethics.org/segl-at-ala/

## THE OXBOW SCHOOL - CALIFORNIA

Located in Napa, California and established in 1998, the Oxbow School offers an intensive visual arts and humanities program combined with rigorous academics. In its studio art environment, artists, faculty, and students collaborate in the practice of artistic inquiry and investigation. Students are trained in painting, sculpture, printmaking, photography, and digital media while satisfying MKA graduation requirements. Up to 48 students are offered admission each semester. For more information, please visit The Oxbow School website: http://www.oxbowschool.org/

## UPPER SCHOOL FACULTY

Thomas W. Nammack
Headmaster
B.A., Brown University
M.S.Ed., University of Pennsylvania

Dr. David Flocco
Head of Campus/Assistant Headmaster for
Strategic Initiatives
B.A., M.A., Boston University
M.Ed., Teachers College, Columbia

University
Ed.D., Seton Hall University
Stephen Valentine
Assistant Head of Campus/Director of
Academic Leadership/Interdisciplinary
Department Chair/English
B.A., Boston College
M.A., University of Virginia

Karen Newman
Assistant Headmaster for Curriculum
and Professional Development
B.A., Swarthmore College
M.A., University of Chicago

## Benjamin Goodrich

Director of Educational Technology /
Associate Director of Curriculum and
Professional Development
B.S., Brown University
M.Ed., Harvard University

## Michelle Barbetta

Mathematics
B.S., M.S., Montclair State University

Sandrine Beddou-Vellucci
French/Spanish
B.A., Université d'Avignon, France

Post-Graduate Teaching Certification,
Trinity and All Saints College, UK

## Jeffrey Beer

Latin
B.A., Trinity College
M.Div., Yale University

Mark Bishop
Mathematics
B.S., University College London, UK

PGCE, The Institute of Education,
University of London, UK
M.S., Montclair State University

Jacquelyn Blum
Science
B.A., Wellesley College

Ph.D., University of Pennsylvania

## Paige Boncher

English/Spanish
B.A., Wellesley College
M.A., Middlebury College

Cortland Bosc
Director of Global Experience/Tenth Grade
Dean/History
B.A., Appalachian State University
M.A., University of Texas at Austin

Geoff Branigan
History
B.A., University of Notre Dame
M.A., New York University

Gillian Branigan
Dean of Students/History
B.A., Oberlin College

Allison (Currie) Brown '04
Ninth Grade Dean/Science
B.A., Hamilton College
M.A., Teachers College, Columbia University

## Steven Brown

Head Athletic Trainer/Health, Wellness \&
Physical Education
B.S., The George Washington University

## Erica Budd

Professional Development Coordinator/
Technology and Learning Coordinator
B.A., Dickinson College
M.A., University of Pennsylvania

## Liam Campbell

English Department Chair
B.A., Tulane University
B.Ed., University of Toronto, Ontario
M.A., Queen's University, Ontario

## Timothy Cook

History/Economics
B.A., University of Michigan
M.B.A., The University of Ulster,

Northern Ireland
M.A.T., Montclair State University

## Alicia Cuccolo

Fine and Performing Arts/Art
B.F.A., School of Visual Arts
M.A., New York University

Dr. Lily Cui
English
B.A., New York University

Ph.D., Cornell University

## Paul Cunningham

English
B.A., College of the Holy Cross
M.A., Rutgers University

Deanna Donnelly
Senior Associate Director of College
Counseling
B.A., Bates College

## Robin Dyer

Learning Specialist
B.A., Pennsylvania State University
M.A., Fairleigh Dickinson University

Ed.M., Rutgers University

## Patricia Forbes

English
B.A., Kansas Wesleyan University
M.A., Middlebury College
M.Ed., The College of New Jersey

Maria Gilmartin
Music
B.A., William Paterson University
M.A., Montclair State University

## Dimitri Hadjipetkov

Music
B.A., Montclair State University
M.A., New York University

Injoo Han
Assistant Director of Athletics
B.A., Colby College
M.A.T., Montclair State University

Samuel Harris
Mathematics and Computer Science
A.B. Princeton University

Dr. River Xinping He
Chinese
B.A., M.Phil., Peking University
M.Phil., Ph.D., Chinese University
of Hong Kong
David Hessler
History
B.A., Davidson College
M.A., New School for Social Research

Nicole Hoppe
Dance/Theatre
B.M., American Musical and Dramatic

Academy
B.F.A., The New School University
M.A., Montclair State University

## Dr. Michael Houston

French
B.A., M.A., University of Texas

Ph.D., University of North Carolina

## George Hrab

Science
B.S., Rutgers University
M.A., Teachers College, Columbia

University
Dennis Hu
Mathematics and Computer Science
Department Chair
A.B., Princeton University

## Miller Hughes

Learning Specialist
B.A., Connecticut College
M.Ed., Hunter College, City University,

New York

## Dr. John Jacobs

World Languages Department Chair/Latin
A.B., Brown University
M.A., Yale University
M.A., M.Phil., Ph.D., Yale University

Isabel Janelli
Spanish
B.A., M.A., Middlebury College

## Peter Jensen

Spanish
B.A., M.A., Auburn University

## Thomas Jones

History
B.S., University of Delaware

Post-Graduate Teaching Certification,
University of Cincinnati
Tony Jones
Science
B.A., Franklin Pierce College

Maryanne Kesler
Senior Associate Director of College Counseling
B.A., University of Notre Dame
M.A., New York University
M.A., Queens College, City University,

New York
Dr. David Korfhage
History Department Chair
A.B., Harvard University
M.A., Indiana University
M.A., Ph.D., Princeton University

Dr. Suresh Krishnan
Mathematics/Economics
B.Tech., Indian Institute of Technology
M.S., Clarkson University

Ph.D., University of Michigan

## Robert Leather

Twelfth Grade Dean/Health, Wellness or
Physical Education
B.S., The University of Birmingham, UK
M.A.T., Montclair State University

Christa Leonard
Fine and Performing Arts Department
Chair/Photography
B.F.A., College for Creative Studies
M.F.A., Cranbrook Academy of Art

Varsay Lewis
Counselor
B.A., Rowan University

Ed.M., Wilmington University
Charlotte Lillard
Associate Director of Admissions
B.A., Centre College

## Tim Lynch

Science
B.A., Cornell University
M.S., California Institute of Technology

## Dr. Louise Maxwell

Director of College Counseling/History
B.A., University of Virginia
M.A., Rice University

Ph.D., New York University
Jill Maza
Tri-Campus Head Librarian
B.A., The College of William and Mary
M.A., The University of North Carolina
at Chapel Hill
Derek Morf
Mathematics
B.S., Indiana University of Pennsylvania
M.S.,Teachers College, Columbia

University

## Sarah Mueller

Fine and Performing Arts/Art
B.F.A., Western Michigan University

Diana Murelli
Mathematics
B.S., M.S., Central Connecticut
State University

## Leslie-Ann Murray

English
B.A., Hunter College
M.F.A., Rutgers University

Charles Olsen
Music
B.M.Ed., Peabody Conservatory of Johns

Hopkins University
M.Music, Julliard School

Jordan Raper
Health, Wellness \& Physical Education
Department Chair/Athletic Liaison to
the CCO
B.Ed., Leeds Carnegie University, UK
M.A., Montclair State University

## Benjamin Rich

Science
B.A., Colgate University
M.Ed., University of Maryland

## Nat Rosen

Mathematics
B.A., Columbia University
M.M.E., Pace University

## Dr. Eric Salehi

English
B.A., Loyola University
M.A., Ph.D., New York University

## Kyle Salkin

Eleventh Grade Dean/History
B.A., M.A., The George Washington

University
Dr. Petra Sauer
Science Department Chair
B.S., Fordham University
M.S., Ph.D., Stevens Institute of Technology

## Amy Shapiro

Senior Associate Director of College
Counseling
B.A., Tulane University
M.A.T, Boston University

Maria Shepard
Academic Dean/History
A.B. Princeton University
M.S.Ed., University of Pennsylvania

## Meg Slotkin

French
B.A., Swarthmore College

## Laurie Smith

Science
B.A., Clark University
M.C.L.F.S., University of Maryland

## Todd Smith

Director of Athletics
B.A., Lafayette College
M.Ed., Lehigh University

## Patricia Sullivan

Senior Associate Director of Athletics/
Health, Wellness \& Physical Education
B.A., M.A., Montclair State University

## Rebecca Thompson

Science
B.S., Dickinson College
M.S.Ed., University of Pennsylvania

## Caroline Toman

English
B.A., Wheaton College
M.Lit., Drew University

## Emily Tompsett

Mathematics/Computer Science
B.A., Hamilton College
M.Ed., Boston University

Laura Treadaway
Mathematics
B.S., M.Ed., Vanderbilt University

## Dr. Marc Tuazon

Science
B.S., Rutgers University
M.S., Montclair State University

Ph.D., Rutgers University

## Kerry Verrone

Dean of Student Life/Tri-Campus Ethics
Chair/History
A.B., Brown University
M.A., Yale University

## Roger Walter

Spanish
B.A., The George Washington University
M.A., Universidad del Norte, Colombia

## Dr. Valbona Watkins

Spanish
B.A., B.S., Lock Haven University
M.A., St. John's University

Ph.D., Pennsylvania State University

## Ronald Wolfson

History
B.A., Clark University
M.A., Teachers College, Columbia

University
Yingqian Xiao
Chinese
B.A., Guangdong University of Technology, China
Ed.M., Rutgers University

## Year-by-Year Course Offerings and Standardized Testing Options

| DEPARTMENT | GRADE 9 | GRADE 10 | GRADE 11 | GRADE12 |
| :---: | :---: | :---: | :---: | :---: |
| ENGLISH | English 1 CRW <br> English 1 <br> English 1 Honors | English 2 CRW <br> English 2 <br> English 2 Honors | Topics literature |  |
|  |  |  | AP Language and Composition: S2 | AP Literature and Composition: S2 |
| WORLD LANGUAGES | Chinese, French, Latin, Spanish 1 |  | Chinese, French, Latin, Spanish 3 |  |
|  | Chinese, French, Latin, Spanish 2 |  | Chinese, French, Latin, Spanish 3 Honors C | Chinese, French, Latin, Spanish 5 Honors |
|  | Chinese, French, Latin, Spanish 3 |  | Chinese, French, Latin, Spanish 4 | AP Chinese, French, Latin, Spanish |
|  | Chinese, French, Latin, Spanish 3 Honors |  | Chinese, French, Latin, Spanish 4 Honors |  |
| HISTORY | Early World History Early World History Honors | Modern World History | U.S. History | Civil Rights Revolutions <br> American \& Comparative Gov't. Honors <br> Economics Honors <br> Political Theory Honors <br> Chinese/Japanese History |
|  |  | Modern World History Honors | U.S. History Honors |  |
|  |  |  | Economics <br> The Holocaust and Genocide |  |
| MATHEMATICS <br> AND COMPUTER SCIENCE | Computer Science Fundamentals Introduction to Programming |  | Precalculus MATH <br> Precalculus Honors mat <br> Advanced Precalculus Honors mAtr <br> Calculus mat <br> Calculus Honors mat | AP Statistics <br> AP Calculus AB |
|  | Geometry <br> Geometry Honors <br> Algebra 2 | Precalculus MATH 1 <br> Precalculus Honors MATH 1 or 2 <br> Advanced Precalculus Honors  |  | AP Calculus BC AP Calculus AB/BC <br> AP Computer Science |
|  |  |  |  | or 2 Multivariable Calculus Number Theory |
|  | Algebra 2 Honors math 1 |  |  | Data Structures Linear Algebra |
| SCIENCE | Biology 1 | Chemistry 1 | Science Research Honors |  |
|  |  |  | Biology 2 Honors biology m | Physics 2 Honors physics |
|  |  |  | AP Biology blology eor M | AP Physics C |
|  | Biology 1 Honors biology e <br> Biology 1 SRH biology e | Chemistry 1 Honors chemistay <br> Chemistry 1 SRH  | Physics 1 | AP Physics C: E and M |
|  |  |  | Physics 1 Honors Chemistry 2 Honors PHYSIC CHEMIS | AP Environmental Science Astronomy 1, 2 |
|  |  |  | AP Chemistry | Environmental Science 1, 2 |
|  |  |  |  |  |
| SUMMARY | 9 Subject Test(s) | 10 PSAT <br> Practice ACT <br> Subject Test(s) | 11 PSAT/NMSQT <br> Practice ACT <br> SAT Reasoning \& Subject Test(s) <br> ACT <br> AP Exam(s) | 12 SAT Reasoning <br> Subject Test(s) <br> ACT <br> AP Exam(s) |

## ACADEMIC PLANNING

Student: $\qquad$ Faculty Member: $\qquad$ Date: $\qquad$

## Grade 9

| English 1CRW, 1, 1H | Fine and Performing Arts |
| :--- | :--- |
| Geometry (H) or Algebra 2 (H) | Global Citizenship - fall <br> Health, Wellness \& Physical Education 1 - spring |
| World Language | Early World History (H) |
| Optional Extra Course | Biology 1 (H) (SRH) |

## Grade 10

| English 2CRW, 2, 2H | Fine and Performing Arts |
| :--- | :--- |
| Algebra 2 (H) or (Adv. H) <br> PreCalc (H) or (Adv. H) | Health, Wellness \& Physical Education 2 - fall <br> Ethics \& Leadership - spring |
| World Language | Modern World History (H) |
| Optional Extra Course | Chemistry 1 (H) (SRH) |

## Grade 11

| English topics, fall and spring <br> AP English Language - spring | Fine and Performing Arts |
| :--- | :--- |
| PreCalc (H) or (Adv. H) <br> Calculus (H) or AP Calc (AB, AB/BC) | Health - spring |
| World Language | US History (H) |
| Optional Extra Course | Physics 1 (H), AP Physics 1, Chem 2H, AP Chem, <br> Bio 2H, AP Bio, Biomechanics, Env Sci, AP Env Sci |

## Grade 12

| English topics, fall and spring <br> AP English Literature - spring | Fine and Performing Arts |
| :--- | :--- |
| Calculus (H) or AP Calc (AB, AB/BC) <br> Statistics (AP) | Health - fall |
| World Language | History options |
| Optional Extra Course | Science options |

Students should consider taking a Subject Test after successfully taking certain courses, as designated on the reverse side of this form. Please note that not all course options are listed above.

This document is for planning purposes only. Students must satisfy all prerequisites for honors and AP courses. Course offerings and prerequisites may change.


[^0]:    Prerequisites: For seniors, B+ in U.S. History or B in the honors course; for juniors, A in Modern World History or $\mathrm{B}+$ in the honors course and co-enrollment in U.S. History Honors; and department recommendation
    Full Year 6 Credits

[^1]:    Prerequisites: $\quad \mathrm{B}+$ in Advanced Algebra 2 Honors, A in Algebra 2 Honors and department recommendation
    Full Year 6 Credits

